Developing digital historians in Italy

Thesis

DEVELOPING DIGITAL HISTORIANS IN ITALY

Claudia Favero

Msc, MAODE

Thesis submitted to The Open University for the requirements of the degree
EdD – Doctorate in Education

Centre for Research in Education and Ed Technology (CREET)

The Open University

Educational Technology

February 28th, 2014

ABSTRACT

This study concerns the experiences of Italian digital historians and their implications for historical scholarship. The present and future of the profession of historian, in academia and outside it, are inextricably linked to the digital revolution that is pervading society. How historians face the challenges and take advantage of the affordances of technology will have a strong impact on teaching and researching history in the future. However, the voice of digital historians on these issues does not emerge systematically from the literature.

This research uses grounded theory methodology to delineate a theory of being a digital historian in Italy, a country with a rich historiographical tradition and widespread interest in history, but a weak connection with technology in scholarly endeavours. Based on in-depth interviews with digital historians, the analysis presented here highlights their initiatives, evaluations and strategies, in relation to all aspects of scholarship but particularly the education of future historians. This research is motivated and informed by my professional experience as lecturer in digital methodologies for historical research.

The emerging theory revolves around the concept of *developing digital history*: Italian digital historians are pioneers, animated by passion and desire to innovate but working in a challenging, largely unsupportive environment where their initiatives have not translated well into educational provision for future digital historians or, more generally, to provide students with tools and methodology for historiography in the digital age. Through an illuminative comparison with interviews conducted with digital historians in the United Kingdom, differences and similarities are analysed, with a view to creating a general theory of being a digital historian and its implications for the future of scholarship in history.

This work postulates that teaching history in the digital age should be addressed within historiography and provisions should be made for sustainable resources and educational programmes.

DEVELOPING DIGITAL HISTORIANS IN ITALY

SHORT CONTENTS

CONTENTS

LIST OF TABLES AND FIGURES

INTRODUCTION: CONTEXT AND RATIONALE OF THE RESEARCH

Digital history is situated at the intersection between digital technology and the "ancient practice of history" (Rosenzweig, 2003, p.738). Historians, at least in the Western world, trace their professional origins to Herodotus, who "began scratching out his *Histories* almost 2500 years ago" (Kelly, 2013, p.78), so this is not the first time that new methodologies, new tools and new instruments have challenged them to rethink and re-evaluate their work and their assumptions. Recently, however, the challenges of incorporating computers and digital technologies into the historians' profession have led, according to Roy Rosenzweig, late founding director of the Centre for History and New Media (CHNM) and one of the leading figures in digital history, to "questioning [its] basic goals and methods" (Rosenzweig, 2003, p.739).

A few historians have worked with computers since their inception – from the late 40s and the early 50s, but the first significant developments date from the 1960s and even more with the development of personal computers in the 1970s and 1980s; Denley and Hopkin, 1987, Denley et al., 1989, and in Italy Orlandi, 1992 and Rowland, 1991 discuss these very early phases in some detail, referring to an area that used to be known as "history and computing" (Denley and Hopkin, 1987). The phase we live today, though, despite being grounded in the use of personal computers, is more significantly linked to the second half of the 1990s and the development of the Internet and the Web (Kleinrock, 2008): the terminology also has shifted towards "digital history" (Cohen et al., 2008, p.2). Relevant elements of these historical phases will be discussed further on in section 1.2, while section 1.1 examines in more detail the working definitions of the terms used in this research, particularly digital history and digital historian.

This study sheds light on the development of digital history as seen through the evaluations of digital historians in the context of higher education in Italy, especially related to the doubts and concerns emerging from the "marriage" (Martin, 2010) of history and technology that relate to the teaching of history.

The professional basis for my decision to start the EdD programme overall and to address this topic specifically was my role as an adjunct lecturer at the University of Turin, Faculty of Political Science, in the field of digital history. In particular, the motivation to undertake this research comes from a module I teach to third year undergraduate students in preparation for their final thesis in history: "Internet for historical research and thesis writing in History of Political Ideas" (CPS, 2013). The objective of this module is to guide students through the opportunities and the dangers associated with using the Internet for academic research. Teaching this module has offered me direct experience of the role of digital history in the education of undergraduate students of history and in their preparation for further studies and the world of work.

The EdD represents an invaluable opportunity for a reflective practitioner in education, or a critically reflective teacher (Larrivee, 2000) to look at her profession with an analytical eye and, in my case, to consider the many facets of the work of digital historians and how they have, in the present and in the recent past, addressed the "digital revolution sweeping through our culture" (Kelly, 2013, p.ix). I am interested in their reflections and considerations, together with their implications for the present and future of the profession. Defining what it means to be a digital historian in Italy has implications not only for those who work with history but also for the role of historians in society and their role in responding to the specific educational needs of the students

and the training needs of new history teachers and academics and to the demands for knowledge that come from the general public and society at large.

From a methodological point of view, this study offers an innovative element by trialling the use of grounded theory to contribute to the scholarship of learning and teaching in the field of history, and in particular digital history. Grounded theory is a social science research methodology based on a "systematic, inductive, and comparative approach for conducting inquiry for the purpose of constructing theory" (Bryant and Charmaz, 2007b, p.1). Building a theory concerning digital historians in Italy is a conceptualising endeavour that aims at connecting the field-specific issues within historiography with educational theory and practice; it also aims at providing a theoretical framework that positively interprets the concerns of the scholars involved with a view to framing elements of comparison with other areas as well as possible recommendations for action. This study is based on the view, presented by grounded theory, but also by the literature on digital history and digital humanities (Terras, 2006, Thaller, 1989 for the UK; Orlandi, 2007; Roncaglia, 2002, for Italy, see section 1.3.2) that a theorizing stance in research can benefit the field as much if not more than a descriptive one.

The situation in Italy regarding digital history is unusual and worth investigating for several reasons. In Italy there is no formal educational offer, at undergraduate or postgraduate level, in digital history (Noiret, 2011). Of the eleven largest universities, with over 40.000 students each, i.e. University of Roma "La Sapienza", Bologna, Napoli "Federico II", Bari, Torino, Catania, Pisa, Milano Statale, Padova, Palermo and Firenze (CENSIS, 2014), none offers a course of study in or close to this field. Moreover, digital history and digital humanities do not have a "discipline class" of their own, which is essential in Italy for a full degree to be set up and, more importantly, for

the creation of faculty positions (MIUR, 2000). There is a "degree class" for "Metodologie Informatiche per le Discipline Umanistiche" ("Information and Communication Technologies for the Humanities") (MIUR, 2007, p.5), which was represented in the Universities of Pisa, Firenze, Calabria and Venezia in the early 2000s but it is not currently applied, except at the University of Pisa, where the only undergraduate degree in Humanities Computing in Italy is also being offered, even though under the general disciplinary area of "Filologia, letteratura e linguistica" ("Philology, literature and linguistics", Università di Pisa, 2014).

More specifically, in Italy there is no systematic approach to training history students in digital history, nor is there a visible level of availability of methodological courses for a critical use of digital resources and tools for history. Only individual cases exist, such as the above mentioned course at the University of Torino, suggesting that there is a concern and an effort to translate at least parts of digital history into opportunities for training, but this effort and concern remain isolated and outside formal and structured training programmes. This does not mean that digital historians in Italy do not exist or that the kind of training and education in digital history that is lacking is not desirable, but it makes the case of Italy particularly interesting for this topic.

An element of comparison is also introduced with digital history in the United Kingdom. On the basis of the literature on digital history and digital humanities and a general overview of the number and relevance of digital history projects in the UK compared to Italy (see sections 1.2 and 1.3), it is clear that we are facing a situation of abundance versus scarcity, which makes the comparison both challenging and meaningful. For instance, there are at least five digital humanities centres in the UK, according to the European Association for Digital Humanities (EADH, 2014), while the only Italian member of the Association is a single digital humanities project and not an

academic or research centre. Neither of the two countries appears to have any digital *history* centres, in sharp contrast with the USA, where there are at least five, in addition to several digital humanities centres (Wikipedia, 2014a). The USA is, actually, the place of origin of the term "digital history" (see section 1.1.1).

However, in the UK several universities and digital humanities centres are invested in the field of digital history with programmes, such as the MA in Digital History at the University of Essex and the Digital Humanities masters' degrees at UCL and King's College London.

Furthermore, there are elements of the history of historiography, defined as "the writing of history; written history" and also "the study of history-writing, especially as an academic discipline" (The Oxford English dictionary online, 2013) of the two countries that contribute to the relevance of this comparison.[1] Historiography in Italy is characterized by two main elements: a "many-layered, multifarious and geographically ramified" institutional panorama (Porciani and Moretti, 2010, p.122), which has contributed to a fragmentation in historiography as well as a polarization of history writing and education towards specific political or social interests. This is accompanied by a long tradition of giving prominence to the philological and literary aspects of historical research and teaching at university level, which has made the training of school teachers in history the exclusive domain of Faculties of Arts and Humanities. This aspect is in sharp contrast with another peculiarity of the Italian higher education system, as compared particularly to the UK and the US, which is the fact that the teaching of history at university level in Italy is divided – or partially duplicated, it

[1] In this study, the term history is always considered to be equivalent to historiography, unless otherwise stated.

could be said – between the Faculty of Arts and Humanities and the Faculty of Political Science, thus between a humanities and a social science field.

There are specific elements of interest related to the development of digital history in the UK, which makes it very valuable for a study of this kind, including the experience of the Association for History and Computing (Denley and Hopkin, 1987; Denley et al., 1989; Mawdsley et al., 1990) and the research and education carried on within digital humanities (see, for instance, Terras, 2006 on disciplinary issues and theory). Other relevant topics are connected with interest in historical narratives on the part of the general public, represented for instance by a long tradition of local history societies, but also a recognised aptitude of British historians to disseminate to the public (Anderson, 2010).

In both countries, and beyond, changes in technology, especially digital and communication technology, are happening at an ever increasing pace and have reached very high levels of pervasiveness in all aspects of social life, including research and education. These developments inevitably put pressure on scholars, of history as of other subjects, to react: as Kelly (2013) affirms, historians have a specific responsibility to "guide [their audiences] through the past, and through the way digital technology might be used to understand and represent the past" (p.12). Moreover, today's students of history are the teachers of history of tomorrow, not only as scholars in academia, but also as teachers in schools, where most individuals in modern society come into contact with the subject. The ways in which historians teach history and communicate it to the general public – and the way they choose to deal with technology in their work – in turn influences how teachers will teach history and how society will relate to it.

My research question reflects these considerations and asks

What does it mean to be a digital historian in Italy and what are the implications for history education?

In order to address this question, this work presents:

- a literature review on the topic of digital history, covering working definitions, a brief historical overview and an analysis of the relationship between digital history and education;
- a methodology section in which four qualitative research methodologies are analysed and compared in order to identify the most suitable for this study; the reasons for the adoption of classical grounded theory (Glaser and Strauss, 1967; Glaser, 1998) are discussed and the procedure for data collection and analysis is outlined;
- a finding and analysis section, with the purpose of creating, in accordance with the principles of classical grounded theory, a substantive, i.e. area specific, theory of digital history in Italy, followed by elements of comparison with the situation in the United Kingdom, in order to identify possible elements of a formal theory, i.e. a theory with a higher level of abstraction;
- a discussion, conclusion and implications section that brings together the results and limitations of this research project, together with the potential for future research.

The differences and similarities in the comparison between the emerging theory and elements drawn from data collection in the UK will reinforce the analysis by illustrating and critically comparing some aspects of the digital history cultures of the two countries.

1. LITERATURE REVIEW

The literature review consists of three main elements: a section on working definitions of digital history and digital historian, a brief historical overview on how digital history has developed, in Italy and beyond; a section on the relationship between digital history and education, looking at the disciplinary as well as theoretical aspects.

1.1 DIGITAL HISTORY AND DIGITAL HISTORIANS: WORKING DEFINITIONS

1.1.1 DIGITAL HISTORY

The term "digital history" as a form of historiography, as opposed to the history of digital sources or artefacts (Carroll, 1995), was first coined in the United States by E.L. Ayers and W.G. Thomas III, when they founded and named the *Virginia Center for Digital History* (VCDH) in 1997–1998 (Cohen et al., 2008). This is the term generally used in current literature to describe the field of activity of historians working with Information and Communication Technologies (ICTs), and particularly the Internet and the Web, in research and education. As mentioned above in the Introduction in earlier phases the term "history and computing" (Denley and Hopkin, 1987, p.iii) was the most widely used, followed by "e-history" (Boonstra et al., 2004, p.6), as an echo of e-learning and similar terms, which were popular in the early 2000s.

Most of the literature discussing what digital history is or should be has a strong tradition in the USA, where most of the various attempts at definitions have been made (Cohen et al. 2008). This is a further element that makes the cases of Italy and the UK interesting, for the circumstance that authors in the field have adopted the term "digital history" (in Italy see for instance Cattunar, Grandi, Tomasoni, 2013, §1; Grandi and Ruiz, 2012, §2; "storia digitale" Noiret, 2011, p.173 and digital history, p.180; and in the UK Floud et al., 2013, §1), which was generated outside their own traditions, where

"history and computing" and "*informatica storica*" respectively had been used beforehand. As regards the Italian case specifically, other expressions, such as "*applicazioni informatiche adeguate alle esigenze della ricerca storica*" (ICT applications that address the needs of historical research) (Rowland, 1991, p.693) and "*storia con l'ausilio del computer*" (history with the support of computers) (Noiret, 2008, p.194), were proposed but never widely used.

Nonetheless, despite its widespread use, the term "digital history" is characterized by competing polarized definitions. A very pragmatic one that equates it to a "toolbox" is expressed by Michael Frisch (in Cohen et al., 2008) with the question "What do these emerging digital tools do to our sense of the work we are and can be doing?" (p.6), while a more radical view has been linked to how digital history might change the profession and even bring about its democratisation (Ayers, 1999). Connecting somewhat the extremes, Burton (2005), for instance, offers a definition that begins with the "tools" view: "digital history is the process by which historians use computers to do history in ways impossible without the computer", but then highlights the possible future effects as "a revolution in the history profession that will change the way history is done" (p.207).

This is echoed, but also qualified, by the distinction between "raw" and "cooked" digital history offered by Daniel Cohen (2004b), of the Center for History and New Media (CHNM). He puts the emphasis on historical sources in his definition, by asserting that "raw digital history comprises documents, information and communications that are heterogeneous and that have little, if any, organization", while "cooked digital history takes such historical materials and adds helpful markings and a measure of homogeneity" (Cohen, 2004b, p.337). With this distinction, Cohen aims at encouraging researchers and teachers of history to be involved in the transformation

from “raw” to “cooked”, exemplified in his “how to” work (coedited with Roy Rosenzweig): “Digital history – A Guide to Gathering, Preserving, and Presenting the Past on the Web” (Cohen and Rosenzweig, 2006).

The working definition for digital history provided by one of the inventors of the term, William G. Thomas III (Cohen et al., 2008) is: “an approach to examining and representing the past that works with the new communication technologies of the computer, the Internet network, and software systems” (p.2). He specifies that digital history is on the one hand an area of scholarly production and on the other hand a methodological approach to doing history. This is very similar to the definition provided on the CHNM Website:

> *Digital history is an approach to examining and representing the past that takes advantage of new communication technologies such as computers and the Web. It draws on essential features of the digital realm, such as databases, hyper-textualization, and networks, to create and share historical knowledge.*

An older definition by Calandra and Lee (2005) also highlights the issue of the sources, which are essential to any historian’s enquiry, and defines digital history as a combination of digital sources and the not necessarily digital historical accounts based on those digital sources: “Digital history [can be defined as] the study of the past using a variety of electronically reproduced primary source texts, images, and artefacts as well as the constructed historical narratives, accounts, or presentations that result from digital historical inquiry” (p.323).

All these definitions have useful elements, but the definition provided recently by Heppler (2013) is the best fit for this study.

Heppler (2013) says:

> *The advent of digital technologies is changing and challenging the ways historians practice their craft. […] Digital history is several things: a* ***methodology*** *meant to aid the traditional art and practice of historians, the* ***use of digital tools*** *to gain insight into information that cannot be done with a legal pad and pen, allows historians to* ***disseminate*** *and present their information in new ways, and a means to reach* ***wide audiences*** *through digital technologies [emphasis added]*.

This definition is best suited for the purposes of this study because it explicitly highlights recent developments, but also because it summarises three key areas that emerged in other definitions, i.e. methodology, research tools and dissemination to wide audiences. It does not limit its scope to what digital historians do, but it also opens up the perspective to the discipline as a whole and to society as well.

Moreover, Heppler (2013) provides a different emphasis on the three elements: the methodological innovations "aid" the traditional, trusted, accepted, historical research methodology; the tools provide opportunities that were not available before and the dissemination and communication, which includes the educational aspect, is innovative in methods and scope.

In section 4.1, the use of this definition is checked with the data collected in the study for applicability and explanatory potential.

Finally, while discussing the definition of digital history, references must be made to the definition of digital humanities, not just because history itself belongs (or is generally perceived as belonging) to the humanities, but also because of the interactions of the two fields with specific reference to the digital. Defining digital humanities, if

one attempts to go beyond the bare essentials, i.e. an "interdisciplinary academic area of activity" (Hockey, 2004), is just as complex as defining digital history, possibly more complex, due to the high level of inter-disciplinarity and coexisting epistemologies brought about the considering a group of disciplines (the Humanities, in fact) rather than a single discipline. Despite the fact that, even very recently (Terras et al., 2013) it has been argued that defining digital humanities might indeed prove impossible, a "What is Digital Humanities project" (Heppler, 2014) has been recently created to address the issue and avoid the strictures of one definition taking precedence over the others. An illuminative definition, chosen among the many offered by this project, is useful to set the scene: "a multifaceted disciplinary field where humanities interests and research questions are addressed through computing and/or find an expression in the digital medium (Raffaele Viglianti)" (Heppler, 2014).

1.1.2 DIGITAL HISTORIANS

Based on Heppler's definition (2013) of digital history, digital historians can be defined as historians who use a digital methodology to aid their work, based on recognised and accepted practices, employ digital tools that allow them not only to work in new ways but also to produce research and education outputs for the benefit of more and different audiences than before.

A useful connection can be made here with the concept of "affordances", adapted for the field of educational technology by Conole and Dyke (2004a, 2004b) and aimed at enhancing practice in ICT-supported learning by providing a theoretical basis for this practice. Affordances are a tool to interpret the "relationship between the infrastructure of information and communication technologies and people's use of those technologies" (Conole and Dyke, 2004b, p.301). Even though the concept is in itself complex and controversial (Boyle and Cook, 2004 and Conole and Dyke, 2004b), its

evocative and explanatory power is significant because it is able to connect potential/future use with actual use of technological tools, both of which are key to understanding the role of technology in a disciplinary field such as history, where the use of computers is not inherent to the traditional forms of scholarship. Weller (2011) also acknowledges it by saying that "this subject arises in almost every discussion around technology and education", but also warning against the risks of "technology determinism" (p.10).

The digital historian does not passively take advantage of the increased availability of sources or speed of communication but actively makes digital history, with new methodological aids, innovative tools, new outputs and new audiences. This approach has consequences for the education and training of new historians. As Thomas, in a conversation with other digital historians (Cohen et al., 2008, p.5) noted, "expanding the audience for historical scholarship continues to be a goal for digital historians". In terms of the diffusion of digital history among historians, however, the most widely held view is that, in the US, UK and Italy, digital historians are still a minority (Cohen, 2004; Detti and Lauricella, 2007; Floud et al., 2013; Poyntz, 2010); Kelly (2013) states that "many of us remain generally dismissive of the value of new media technologies for the teaching and learning of our discipline" (p.6).

As a consequence, digital historians are still "pioneers and explorers" (Burton, 2005, p.208), in numbers as well as in attitude. How this translates into scholarship in their field, and particularly in research and education is a key element of this research and will be discussed further in section 1.3.

The following section 1.2 presents an overview of the development of history computing and digital history as a starting point for an analysis of the situation today.

This is not intended to be an exhaustive historical account, but a selective analysis of elements that have an impact on the present and possibly the future.

1.2 A BRIEF HISTORY OF DIGITAL HISTORY

A historical overview of the relationship between historians and digital technologies, especially concerning research and education in history, is important insofar as there are connections and effects on the present time. A full analytical discussion of the history of digital history is both outside and beyond the scope of this work. However, some elements of this history help us understand what it means to be a digital historian today and what the implications are for education, which is the research question for this study.

On the one hand, the relationship between the development of digital history and that of digital humanities will be touched upon throughout the whole of the present section, whenever it becomes relevant. The development of digital history and digital humanities shows a parallel course in some instances, but not always. As will be described below, there are elements of social sciences theory and practice that weigh on the development of digital history, at times in sharp contrast with the developments in digital humanities. Also, this topic is somewhat controversial for the Italian case, where, as highlighted in the *Introduction*, history is taught both at university level both in the Faculty of Arts and Humanities and in the Faculty of Political Science. This will be considered, in the light of data that has emerged from the research, in section 3.3.3.

On the other hand, a temporal distinction will be made between the periods before and after the Internet and the Web. It will be argued that it is the second period that is most significant for this study, but there are elements from the previous period that have an influence on the situation today and must still be noted.

Therefore, the two periods are:

- a **before the Web** phase starting from the use of mainframe computers and related to quantitative research methodologies, followed by the spreading of personal computers among historians, when terms such as "history and computing" and its Italian equivalent, "informatica storica", were prevalent and the methodological choices of the historical researchers were the main, if not exclusive, determinant of if and how they were involved in working with computers; the personal computer is the linking element to the next stage, but it is only with the interconnectedness brought about by the Internet that the panorama really changes, for research as well as education;

- an **after the** Web stage, divided into a first decade, including uses of multimedia and hypermedia for history writing and education, and the second decade of the Web, Web 2.0 and the emergence of the "digital" terminology. This is the period when the pervasiveness of change in technology within society starts to produce systematic effects on the use of computers by historians. Computers and the Web together allow the historians access to a wide range of Web-enabled technologies, numerically and methodologically more dense with implications than the computers alone. However, the consequences of this for history research and education are far from straightforward. These two phases will be considered in turn.

1.2.1 BEFORE THE WEB: FROM QUANTITATIVE RESEARCH TO THE PERSONAL COMPUTER

The first two decades, before the 1960s, are defined by Tito Orlandi (2007), historian of the University of Rome and one of the early experts of history and computers in Italy, as "*Il tempo dei precursori*" ("the time of the forerunners"), when the numbers of historians working with computers amounted to a handful, most of them concerned with literary analysis and text. From this very early period, the power of calculation of

the machines, applied to quantitative research methods, was the first significant contribution of computers to the work of the historian. Probably the best known example is the literary/historical work of Roberto Busa on St Thomas Aquinas, mentioned by histories of digital history (Noiret, 2011) as well as digital humanities (Hockey, 2004).

The following period, called by Orlandi (2007) "*Periodo delle applicazioni pionieristiche"* (1960s-1970s) ("Period of pioneering applications"), is when computers, still mostly bulky mainframe computers, started to have a wider impact and their use expanded from text and *corpora* analysis to socio-economic historical research. The association of the use of computers with quantitative research in history in these early decades has influenced, to various degrees, the view of "computerized" ("*informatizzati*", Noiret, 2008, p.191) historians in subsequent periods in both Italy and the UK (Floud et al, 2013; Minuti, 2001; Noiret, 2008).

The history of humanities computing was already advancing in these decades (1960s and 1970s). Svensson (2009) associates the development of humanities computing, with particular reference to the UK, with associations, journals and centres founded in the early 1960s, for instance the Humanities Computing Centre in Oxford. The UK Association for History Computing came much later, and was not founded until the 1980s. Liu (2012) states that the "older" concept of humanities computing, destined to be later replaced by "digital humanities", was "oriented around tool-building, computational linguistics, text analysis, and text encoding" (p.8).

Although much of the quantitative research on textual and literary sources links the historians' work with the other humanists, especially linguists and philologists, and thus humanities computing with history and computing, the socio-economic aspects of

historiographical research refer more directly to the new-found, around the same period, connection between history and the social sciences.

This dichotomy is important because the tension between narrative/textual (Stone, 1979) forms of historiography and socio-economic forms is a factor in the relationship between historians and computers, especially if historians identify themselves with one or the other area and if they chose to adopt and privilege quantitative research methods over qualitative ones. For economic history, for instance, computers were of immediate essential use, as testified by the emergence of a field known as *Cliometrics* or "new economic history" ("*cliometria*", Rowland, 1991, p.693; Thomas, 2004, §2), a quantitative approach that originated in the US but also had a significant presence in the UK (Floud et al., 2013). In Europe, quantification and sociology, under the influence of the French *Annales* school, had a strong influence on British (Cannadine, 2002) and Italian historiography (Noiret, 2011; Romano, 1981), encouraging and supporting the use of computers for historical work.

Still, while the debate on the issues related to the use of quantitative methods for historiography as well as the added value (or lack thereof) of the use of computers was intense among those involved (Boonstra et al., 2004; Noiret, 2008), most historians were left out of these developments until the personal computer began its true expansion in the mid-1980s. Therefore, training for these forms of "history and computing", whether essentially literary or essentially socio-economic, in most cases quantitative oriented, was reserved (or left) to the few specialists and their followers.

While mainframe computers were difficult to access and required heavy technical intermediation (Rowland, 1991), personal computers meant that historians could have individual, and relatively affordable, access to the computing power. Moreover, they lowered historians' dependency on centralised computing facilities in their University

and on the time and willingness to cooperate of the staff employed there (Rowland, 1991). Also, with the development of more accessible and flexible software, historians were able to better exploit the potential of the computers to their own advantage, for instance to manipulate their data not only for their use, but to transfer them to other historians (Rowland, 1991). The path towards more independence from the centralised machines (and their technical guardians) is an important legacy of the personal computer to the historian's work today. It is also the source of a tendency towards an "artisanal", mainly individual, approach to making history with computers (Noiret, 2008, p.195) that persisted after the emergence of the Web. This issue will be addressed in more detail in the next section 1.2.2.

At the same time, by the early 1980s, the social science turn had lost its impetus and quantification had not shown the results expected from the "grand theories and teleologies" (Cannadine, 2002, p.6) they were supposed to produce, even though some valuable accomplishments were achieved, such as the data series of International Organisations (Noiret, 2008). At the same time, a shift from sociology to anthropology, especially in Italy and the UK, as a source of inspiration for history, produced a revival of narrative and linguistic/literary turn (Noiret, 2008). Again, the personal computers' software was more adept at processing text and less dependent on numbers and quantification to work (Mawdsley et al., 1990).

In the UK, the Association for History Computing was created to support the work of historians who wanted to address computer-assisted research and teaching issues and to advance interaction between historians and ICT experts, particularly in the field of the construction and use of databases in history. Both the quantitative/social science and the humanists/literary were represented in the academic interests and the writings of the members.

The main documentary legacy of the Association consists of three books with similar titles, History and Computing I, II and III (Denley and Hopkin, 1987; Denley et al., 1989; Mawdsley et al., 1990). The first one represents the proceedings of the inaugural conference for the Association held in 1986. What these works exemplify is not only the outcomes of specific projects or the presentation of new problems and solutions, but also the desire to bring together those interested and involved in this field for discussion and mutual support, based on the training and support needed for historians to deal with the technical issues involved in working with computers. These sources offered a practical guide to historians who wanted to engage with the technology and did not know where to start. Also, these works, in their introductory essays and conclusions, presented useful discussions on the phenomena and the underlying issues. In this sense they have a relevance that goes beyond the practical questions and answers, which are now mostly outdated.

They also provide valuable insights into the motivations and characteristics of digital history in the UK. In his evaluation of the nature and future of historical computing up to his time, Harvey (1990, in Mawdsley et al.), traces a brief history of historiography in Britain and links it with a "national paradigm", defined as an attachment to empirical, scientific, developmental history as opposed to more theoretical perspectives. He argues that this stance is connected with the "tremendous support" (p.206) that historical computing enjoys in Britain, because it provides an exceptional set of tools to conduct scientific historical research and it reinforces existing tendencies, rather than posing a threat to them. Thomas (2004) offers a similar view, by saying that overall "British historians […] have established a long and comparatively polite respect for historical computing" (§16). An overview of some elements of the recent history of

the institutional background to higher education in the UK and their connection to contemporary developments in Italy is presented in section 1.2.2.

In Italy, at that time, very few scholarly publications dealt directly with these topics and while an Italian branch of the Association for History and Computing was set up and hosted the international conference in 1992 at the University of Bologna (Bocchi and Denley, 1994), its main educational legacy, a Doctoral degree in History, is no longer running, while only a master's degree in Historical Communication ("Comunicazione storica", Università di Bologna, 2013) survives.

Individual Italian scholars took part in debates abroad, including in the UK (for example, Bocchi and Lugli, 1989, Itzcovich, 1989 in Denley et al., and also Itzcovich, 1993), but there was no systematic approach to the issue within Italy. Soldani and Tomassini (1996), in their edited work based on a conference held in 1994, signalled strongly that at least a group of historians in Italy, such as for example Robert Rowland at the European University Institute and Francesca Bocchi at the University of Bologna (Noiret, 2008), had an interest in debating the use of computers in their work but they presented no initiatives towards institutionalisation or organisation of these efforts.

Rowland (1991) identified very early on that the growing independence of scholars from the technicians (he was referring to the shift from working on centralised mainframe computers to personal computers) was democratizing the use of these technologies and at the same time making the work of the historian on the computer more "artisanal" (p.713), meaning designed and generated by the historians themselves, with minimal intervention from ICT experts.

Noiret (2008) states that the digital world has already changed the profession of historian despite a failure by most to notice at all. He argues that the personal computer

is *de facto* used for everyday activities by most historians, while still little or no effort is being made to integrate digital tools and methodologies into methodology courses for young history scholars and students.

However, the movement from mainframe to personal computers, together with the movement from specialized, *ad hoc* software to general purpose software, such as Windows 3 in 1993, for example, also produced a curious paradox (Floud et al, 2013): while the few historians using specialist software had not been able to convince most of their colleagues to get involved (as Spaeth states in Floud et al (2013), they had not been "dragged along by the slipstream"), at the same time the general purpose software and the personal computer made the need for specialist intervention and knowledge less necessary and the relative usefulness of organizations such as the Association for History and Computing less significant. This process was further intensified by the appearance of the Internet and the Web.

1.2.2 THE WEB ERA

1.2.2A WEB 1.0 (1993 - 2003)

Soon after the Web became public with the browser Mosaic in 1993, in the UK, US and Australia many historians started to experiment with and evaluate the role of the Internet and the Web in their work, especially regarding the availability of primary and secondary sources and new tools for teaching (Brown, 1998; Calandra and Lee, 2005; Evans and Fitch, 1997; Griffith, 2000; Pomerantz, 2001; Robertson, 2006; Smith, 1998; Vess, 2005, 2004; Welsch, 1994). The key transformation, however, is the pervasiveness of this particular technology. As Minuti (2001) asserts, the distinction between expert digital historians, the early adopters of computers for historiography, and the rest of the profession starts to become blurred, because relatively little expert knowledge was required to use the Web for history teaching and research. The

appearance of the Web has thus been equated with a revolution in historiography (Noiret, 2008), starting from the new historian's work station with a computer and a connection to the Internet, a configuration that can be considered, compared to the past, "highly computerized" ("altamente informatizzata", Noiret, 2008, p.190) and ending with the availability of sources on the Internet and the publication of online syllabi to email communication.

Kelly (2013) states that the first significant affordance of the Web, especially with What You See Is What You Get (WYSIWYG) tools such as html/Web editors, was to allow historians to become more independent from specialist technological skills and to be able to initiate projects, especially educational projects, more or less autonomously, and even when they had not dared or wanted to deal significantly with computers before.

The most numerous kind of scholarly sources on history and computers of the mid-1990s and early 2000s are the kind of individual articles mentioned above, often in non-specific (not specifically related to digital history) scientific journals, on teaching experiences that have involved technology, often based on two key elements of the historian's work, i.e. the publication of sources in electronic form and the publication of the outcome of the research, in the form of educational materials (Minuti, 2001). These accounts, despite containing reflective and critical perspectives, were often "rather personal and anecdotal, and without much explicit reference to theory or existing research" (Booth, 2004, p.260) and many of the individually created Web sites and resources have not survived beyond the first decade of the Web (Burton, 2005).

Historians at the time expressed doubts about the hypertextuality and the loss of linear narrative in historiography (Criscione, 2003), despite some advantages being identified very early, especially in the building of teaching materials (Davison, 1997). The main

legacy of these works is the value of the experimentation and the high visibility of these projects, thanks to the accessibility of the Web. Edited works, such as Trinkle (1999) and Trinkle and Merriman (2001) have the advantage of bringing experiences together in sources that allowed a better overview and less individualistic approach.

However, a new distinction started to emerge between the minority of experts, who test and force the use of computers in history on a methodological and epistemological level and those, the vast majority, who see the computer as an ancillary tool with little impact on the methodological premises and the professional assumptions (Detti and Lauricella, 2007).

Edward Ayers, the early American digital historian who created the online project "The valley of the shadow" (Ayers, 1993), one of the few early projects still considered exemplary today due to innovation in the presentation of historical sources online as well as the strong research-based approach (Noiret, 2011). This was also an "applied experiment in digital scholarship" (Thomas and Ayers, 2004, §1) that recognised that "while it is increasingly unusual for a historian, or any other academic, to resist the obvious benefits of the electronic library catalog or email, it is even more unusual for a historian to pursue the full implications and possibilities of the new technology" (Ayers, 1999, §1).

This is when the distinction between "raw" and "cooked", advanced by Cohen (2004b, p.337) in terms of historical sources online, sounds very much applicable to historians themselves, to separate the historians who use computers in a raw manner, for the basic functions they perform for most of their users from historians who 'cook' up digital history with their computers, in the context of a "rich and varied landscape of computer applications" but "less energetic" methodological progress (Boonstra et al., 2004, p.10).

Between the mid-1990s and the early 2000s, the "'history and computing movement' seems to have lost momentum" (Boonstra et al., 2004, p.10).

This development is partially the result of the overabundance of information on the Web paired with a significant loss in scientific and epistemological context and traditional authority and reliability signposts (Parolin, 2002). While the advantages of the large and increasing, even as early as the 1990s, availability of historical sources in electronic format is an extremely positive development for historians (Floud et al., 2013; Noiret, 2011), the tools for identifying, evaluating and appropriately using those sources are not necessarily as readily available. The trained historians can encounter difficulties because of the shifting authorial parameters and loss of the contextual placement and the students can be disadvantaged by the lack of guidance resulting from the difficulties encountered by their teachers. This problem began with the Web but has not yet been fully resolved: if anything, the second decade of the Web has only exacerbated it (Minuti, 2011).

Several attempts were made early on to create taxonomies and categorizations for historical online sources and Websites (see for instance Abbatista, 1999), but the impermanence of the Web and the changed parameters did not lend themselves very well to these endeavours, thus leaving good-willed scholars and students largely devoid of guidance in the *mare magnum* of online historical resources and making the sceptics even more sceptical (Parolin, 2002).

In the Web era, digital humanities (Hockey, 2004) had again several elements in common with the history of digital history, especially related to technological developments, which, as said before, had – and have even more now – a distinctively international character. In the UK, these processes were dramatically enhanced by the Internet and the Web, with the focus still predominantly on text, deeply anchored in the

epistemology of humanities computing (Terras, 2006), with hypertext and hypermedia maintaining centre-stage for most of the 1990s. Liu (2012) asserts that "the scholarly field of digital humanities has recently expanded" (p.8), however, Svensson had already argued before (2009) that humanities computing also had been emerging and expanding for several decades, with, however, very little impact on traditional scholarship, in a situation that resembles clearly what the digital historians were saying at the same time and in many ways are still saying today (Kelly, 2013).

1.2.2B WEB 2.0 (2003 – 2013)

The Web 2.0, or second stage of the Web, is in itself a controversial term (O'Reilly, 2005a): for instance Tim Berners Lee, the inventor of the World Wide Web, maintains there should be no distinction because the Web 2.0 "was what the Web was supposed to be all along" (Ibm.com, 2013). Nonetheless, Web 2.0 is generally taken to indicate a reinforcement and enhancement of the characteristics of the Web in relation to "leveraging collective intelligence" (O'Reilly, 2005, §3) or "harnessing collective intelligence" (O'Reilly and Battelle, 2009, p.1) and "architecture of participation" (O'Reilly, 2004, §1), in the sense of producing content, especially in cooperation with others, as opposed to consuming content already available.

Some historians have described the Web 2.0 in enthusiastic terms, as "a marvellous new stage in the development of the Internet, or at least a very intriguing new collection of applications", but also something "with a darker side", "untamed, undigested, unrationalized, uncontrolled" (Barlow, 2008, §10), where the uninformed and the amateurs can outweigh the professionals. The Web 2.0 has brought historians more sharing, direct participation, content creation and personalization than they had ever experienced before (Noiret, 2008) and "the Web 2.0 movement might allow historians and the public to make history together rather than separately" (Cohen et al.,

2008, p.17). Personal and professional blogs, for instance, are used by historians (Poyntz, 2010) to share more of their experiences with their colleagues, students and the general public. Wikis and podcasts for history teaching and research are also a feature of this time, if not widely used, surely able to produce valuable outcomes (Ferris and Wilder, 2006, Nix, 2010, Rosenzweig, 2006 on wikis; Salvatori, 2009 on podcasts; Poyntz, 2010 on blogs).

This challenge is the focus of one of the few monographs on digital history (Cohen and Rosenzweig, 2006), which is aimed at providing support and tools for historians, in academia and outside it, who want to create digital history projects. This is an important step because it deals directly with the blurring of boundaries between academia and society as a whole and the Web is a tool to accomplish just that. At the same time, the authors provide insights into the "promises and perils" of the digital world for historians, i.e. "capacity, accessibility, flexibility, diversity, manipulability, interactivity and hypertextuality" and "quality, durability, readability, passivity and inaccessibility" (Cohen and Rosenzweig, 2006, p.3). This very thorough conceptual and practical guide to how historians can take advantage of the Web 2.0, also represents a good example of how digital historians have interpreted and largely accepted the increased presence of non-professional historians or amateurs in the research and writing of history, also in response to the increased interest in family history, individual history, "history from below" (Shoemaker in Floud et al., 2013).

The time of the Web 2.0, with its omnipresent use of digital technology in everyday life, however, has exacerbated the already existing generational gap between learners and the majority of their teachers. The students of today are not only users of technology on a significant scale: with somewhat of a hyperbole, Kelly (2013) says that they have also "been creating content online for as long as they can remember" (p.11),

while most of their instructors have kept mostly, at least in their teaching methods, to the footsteps of their own teachers: "our teaching methods have not changed much since 1917" (p.15).

The expression "digital natives" (Prensky, 2001) is often used to put a label to this "difference" as well as to evaluate aspects and uses of Web 2.0 (Barlow, 2008). This concept, originally developed by scholars in the late 1990s and early 2000s, is still under dispute (Bennett et al., 2008; Jones and Shao, 2011) as an optimistic view of a generation immersed in technology and with new learning needs and capabilities.

The existence of this term is a signal that the parameters for education in the field of history are being challenged by generational differences, due to the ensuing technological changes in society. As Kelly (2013) illustrates, while it is not at all easy to interpret the needs and capabilities of today's students, "just because they are adept *users* of technology that is not the same thing as being adept *learners with* technology" (p.viii), it seems also that students are turning away from history "because our approach to the past seems increasingly out of sync with their heavily intermediated lives" (p.3). If this is true, then a call for innovation, and in particular innovation towards the digital, is urgent if not overdue.

The perspective might need to change from the creation of specialist field or associations for digital historians, to a more pervasive approach where digital history should become a "mainstream" feature of historical scholarship and the associations could or would become superfluous. In the US, the American Association for History and Computing (AAHC) proposed "Digital History goes mainstream", as the title of the 2010 Annual Conference, in accordance with the aim of "the reasonable and productive marriage of history and computer technology for teaching, researching and representing history through scholarship" (Martin, 2010). In the UK, the "sister" organization stated

that, “ultimately, the success of the Association for History Computing-UK would be measured by the fact that the use of ICT in historical research and teaching is so embedded in mainstream practice that there is no reason for us to exist” (Reimer, 2007).

In Italy, where no such associations exist and where variations at local, disciplinary and institutional level are very high, especially in digital history education (Minuti, 2011), these implications must be considered even more carefully. In Italy, a significant delay and slowness of response are still present in all aspects related to incorporating the use of the Web into teaching, except for specific initiatives undertaken by individual scholars (Minuti, 2011).

Digital history and digital historians work within and are influenced by the higher education context of their country. The Italian and the UK higher education systems, in recent history, have shared and still share some features, but also present striking differences. They have both developed into “mass” (Anderson, 2011; ANVUR, 2014) systems in the past fifty years, with an expansion from around four hundred thousand students in the late 1960s (Wyness, 2010) to well over two million students enrolled in the UK in 2012 (HESA, 2014) and from a little under half a million in 1966 (ISTAT, 2011) to nearly two million in Italy (MIUR, 2014) in 2012. They also have many more public universities than private universities. These two elements have combined to fuel debates in both countries concerning “the nature of HE finance” (Wyness, 2010, p. 4).

Furthermore, Italy has looked to the UK for inspiration, especially in two areas. Firstly, the introduction in 2001 of shorter (three years as opposed to the previous four or five) degree courses, in an effort to achieve higher completion rates (Perotti, 2002). Secondly, for the overall evaluation strategy, which led in 2011, after several attempts during the 1990s and 2000s, to the establishment of the first official Italian government

agency for the evaluation of quality in academia (ANVUR). The ANVUR's evaluation objectives and procedures were modelled on the UK Research Assessment Exercise (RAE) that is now known as the Research Excellence Framework (REF) (Perotti, 2002; Rubele, 2012). The UK system was in fact the first performance-based university research funding system (PRFS) in the world when it was established in 1986 and it is still used as a model by several other countries (Hicks, 2011).

One significant divergence between the two systems involves the student fee liberalisation process introduced in the UK in 1998 pursuant to the Dearing report (Wyness, 2010). Moreover, in the late 1990s and early 2000s diverging policies were adopted by UK constituent countries, with an increasing difference between HE funding between England and Northern Ireland on the one hand, where the focus was shifted towards student contribution, and Scotland and Wales on the other, where this shift was much more limited (Wyness, 2010). Further changes were brought about in England by the 2004 Higher Education Reform Act and subsequently in 2011 following the 2010 Browne Report (Browne, 2010, Thompson and Bekhradnia, 2011) and are still undergoing analysis as well as criticism (Bradley and Migali, 2013). As a result of this process and especially of these latest changes in England, the funding system currently in place in Italy is more similar to that of Scotland and Wales, since in Italy the students' contribution to the overall university budget, within a means-tested fee structure, has remained capped to around 20% (Durante, Labartino, Perotti, 2011) despite an average increase of 63% in the last decade (Trovati, 2013).

The higher education reforms in the UK overall have tried to respond to two challenges: firstly, the inadequacy of the public financial provision, which emerged in the 1980s, combined with the goal of increasing a rather low participation rate (Wyness, 2010), both of which did not compare well with data from other OECD

countries (Mayhew et al., 2004), and which have persisted in recent years ("the current funding and finance systems for HE are unsustainable", Browne, 2010, p.56). Secondly, an increasing tension between the need to retain a "competitive edge" and "the world leading quality of the system" (Browne, 2010, p.2, p.56) and a series of "advantages already cluster[ing] around one group of universities", which run the risk of making the system overall "more socially exclusive" (Anderson, 2011).

Comparing the two systems before the latest wave of reforms, Perotti (2002), however, identified the main difference between Italy and the UK in the promotion and incentives structures, with "insidership" (p. 17) to the appointing university being the single most important factor at play in the Italian system. Indeed, in the past two decades, the Italian higher education system has also gone through several successive reforms, with a strong expansion of the offer of degree courses and a strong decentralisation, initially within the context of the institution, as mentioned above, of shorter degree courses in 1999, based on a "bachelor" plus "specialisation" (3 years plus 2 years) model (Durante, Labartino, Perotti, 2011) and with successive minor modifications taking place in the past ten years (Trovati, 2013). The system, however, continues to be plagued by a "crisis of governance" (ANVUR, 2014, p. 7), including persistent critical issues, such as the long delays in completion of the degrees and instances of nepotism in access and promotion in academic career (Perotti, 2002; Durante, Labartino, Perotti, 2011).

A reassignment of teaching responsibilities from Italian Faculties to Departments in 2010 has not been associated with the introduction of specific provisions for the promotion of educational technology or digital scholarship within the system: this is only one of the tensions and inconsistencies that are identified by the first study conducted by the ANVUR evaluation agency (ANVUR, 2014).

Digital historians today, therefore, especially in Italy, must consider their role as experts and early adopters of technology in research and education in a context where the institutional and systemic issues are far from resolved.

The following section will further analyse these issues from an educational point of view, in two directions: firstly, with regards to the relationship between digital history and a possible academic field and the academic field of digital humanities; secondly, with regards to the need for a theory or theories of digital history in support or alongside the studies and research on practice and experiences in the classroom and beyond.

1.3 EDUCATION FOR (FUTURE) DIGITAL HISTORIANS

After the brief analysis of the historical development of digital history (1.2), this section draws consequences and conclusions about its impact, effective and or potential, on the education and training of new generations of (digital) historians and the situation today.

It considers two aspects that are key factors to its development: the placement of digital history as a possible academic field and the need for building theory of and for digital history. These two aspects are crucial because, despite neither being absolutely necessary or sufficient *per se* for the successful establishment of teaching programmes, their combined effect could set a solid foundation for it.

1.3.1 DIGITAL HISTORY AS AN ACADEMIC FIELD

Education is the key to developing any scholarly field into the future. This is true not only for the training that is concerned with future scholars, including postgraduate and doctoral students, but also for the training of students at undergraduate level and even in schools. In his famous writings on scholarship, Ernest Boyer calls for faculty

members to “take our mission as educators to heart” (1996, p.129), a reminder that the link between the development of a field and the teaching within it or of it is very difficult to ignore. Conversely, as it was shown by the example of Italy in the *Introduction* (p.10), university education needs to be located within a field or a combined set of fields in order to be structured into an academic programme.

It must be noted that now the term *digital* is dominant: digital humanities is a well-developed and established field, at least in the Anglo-Saxon world (Liu, 2012; Svensson, 2009; Terras, 2006; Terras et al., 2013), and digital history is the most widely accepted term in many countries: we find it used by a French-speaking scholar in recent Italian literature, see Grandi and Ruiz, 2012. Moreover, the protagonists of the digitalisation of scholarship are increasingly being identified as digital scholars (Weller, 2011) and digital scholarship itself is considered as a part of the change academia has been undergoing in the recent years (Kelly, 2013).

Digital historians, in general, fit well into the description of the “digital scholar” given by Weller (2011). Starting from the work on scholarship by Boyer (1991, 1996), Weller provides an in depth analysis of the effects of technology on scholarship and what the future might hold in this respect. For him ‘digital’ is one element of a trilogy, namely “Digital, Networked and Open” (p.5), which describes what scholarship is becoming and could become in the future, not only to remain relevant to society and especially to its younger generations, but also and most importantly to enable all participants in scholarly endeavours to “perceive it as an unprecedented series of opportunities” (p.26), especially insofar as digital scholarship has a liberating effect, especially *vis à vis* physical factors of limitation. Digital scholarship comprises “a range of scholarly activities afforded by new technologies” (p.43) and the digital scholar is “someone who

employs digital, networked and open approaches to demonstrate specialism in a field" (p.4).

The issue, though, is to whom these scholarly activities are afforded. It is obvious that not all scholars are in the same situation or have the same attitude with respect to digital opportunities and digital technologies. Even if Weller (2011) identifies that recent research has only been able to ascertain a "cautious experimentation" (p.52) approach to the digital by most researchers, there remain in his work "a certain amount of hopeful expectation that affordances and abilities will simply emerge", which is a criticism Boyle and Cook (2004, p.297) direct at Conole and Dyke (2004a), also educational technology scientists, on ICT affordances for e-learning.

A recent survey of scholars in one Italian university (Esposito, 2013) shows that the situation is very different, if not outright opposite, when scholars with no specific attachment to digital methods consider themselves "neither digital, nor open". Despite the fact that only 3 historians, out of 18 scholars, were interviewed, this study is an illuminative snapshot of the situation, especially when associated with the scarcity of literature on this topic in Italy.

A key point is whether there is a discipline/academic field (the two terms can be considered equivalent, see Terras, 2006) of digital history within or alongside historiography in general. The evidence shows that there is a discipline of digital humanities, at least in the UK (Terras et al., 2013), while this is not evident for digital history in the literature or in institutional presence.

Of the three main geographical areas – Italy, the UK and the US – considered in this study, only in the US digital history is an identifiable area of study: for instance, the Roy Rosenzweig Center for History and New Media (CHNM) has been at the forefront of digital history worldwide since 1994, not only with specific projects, but also with

scientific and professional titles linked directly to digital history without the mediation of the digital humanities. Nonetheless, even the Center, in its training and publication activities, has very strong ties to digital humanities, two examples being the training/conference series *THAT* (*The Humanities and Technology*) *Camp*, and the *Press Forward* Journal, which aims to "Discover, Curate, and Distribute Scholarship the Web Way" (*Press Forward*, 2014), so potentially even beyond the confines of the humanities. However, the definition of digital history provided on the CHNM website, i.e. "Digital history is an approach […] Digital history complements other forms of history […] while using the latest technology" does not support the existence of a field. This and other definitions emerging from the literature (1.1.1), including the one adopted as a guideline for this study (Heppler, 2013), is not a discipline in itself, but it complements and adds to historiography in various ways.

However, there have been advocates (Boonstra et al, 2004) of the creation of a specific and distinct discipline, neither history nor computing, but "historical information science" (p.20) as a "discipline that deals with specific information problems in historical research and in the sources that are used in historical research, and tries to solve these information problems in a generic way with the help of computing tools".

This proposal has not only been rejected by other scholars, even very recently (Floud et al, 2013), but also responds to the specific situation of the early 2000s, when the main impetus of historical computing had started to fade and the crisis of understanding between the few involved and the many indifferent was probably at its peak.

Don Spaeth (Floud et al, 2013) maintains that the expansion in the use of computers and digital tools in particular from the second half of the last century until today is not due to the efforts of historical information science or those advocating it, but it has

been brought about by the ever stronger impetus of technological changes in society, outside the field of history.

Digital historian and expert of scholarship of teaching and learning, Kelly (2013) has recently brought this issue to bear on the field of historiography. His strong stance (from a US perspective) is based on the assumption that the whole discipline of historiography is facing today a grave challenge: unless innovation in teaching is undertaken, not only taking seriously the issues emerged from the field of SoTL (scholarship of teaching and learning) in history but also through the affordances of the digital world, then "we [the historians] are in trouble" and risk "fad[ing] into irrelevance" (Kelly, 2013, p.128 and p.80), with respect to the pervasiveness of technology in the students' lives.

The immediate threat is not to the existence of the discipline itself, where most if not all historians (about 70% of them, according to a survey conducted in 2010 in the US, Townsend, 2010) do not hesitate to use online sources for their research. In a recent commentary, Ayers (2013) suggest that, while "even the academy, traditionally sceptical of externally generated change, has become blasé about Web-induced transformation", insofar as it produces practical advantage, but "not to transform the substance or form of their scholarship" (p.25), "few scholars are trying, as they did earlier in the Web's history, to reimagine the form as well as the substance of scholarship" (p.28).

The real threat is to historians' "natural audience" (Kelly, 2013, p.x), the students, who often wander the Web without guidance and teach themselves lessons that reinforce their naïveté rather than their historiographical skills. Losing touch with the students and the ways in which they learn and interact with an increasingly connected and digital environment around them is at the core of the author's concerns, as are the more

moderate but equally important goals of making teaching more effective and constructive (Minuti, 2011) and "take full advantage of the opportunities to improve teaching and learning of history through digital media" (Kelly, 2013, p.29).

Minuti (2011), writing about Italy, and Kelly (2013), writing mainly about the US, despite the significant differences between the two countries, both point out that history students in higher education are still taught substantially as they were taught 100 years ago, with most instructors resorting to the lecture for teaching and to the monograph for writing (Booth, 2004) as their main tools of the trade. As Minuti (2011) illustrates, students of the 21st century enter the classroom and they are expected to transform into students of the mid-1900s. This works very much against their employability in and out of academia and traditional teaching careers (Minuti, 2011) but especially may prevent them from taking advantage of the "new, exciting, and often lucrative opportunities" that the digital revolution has opened up for trained historians, for instance in the field of digital archives (Kelly, 2013, p.129). "Digital technology offers us a way forward" (Kelly, 2013, p.9), thereby also answering part of the requirements and expectations of the field of SoTL to develop teaching – and learning – in history in an effort to move the disciplinary culture towards a better integration of all aspects of scholarly activity and in particular to better serve the needs of students and society as a whole (Booth, 2004).

The other essential element, connected but not exhausted by the training of undergraduates, is the training of future (digital) historians, postgraduate and doctoral students. Digital historians can train their own students individually or in small groups, through mentoring and research supervision, or within research Centres such as the CHNM, but this does little to further change in the discipline beyond the confines of the groups who are already involved.

One possible avenue of recourse is deferring the training of the future specialist to the wider and more established field of digital humanities, with all the advantages and risks involved in aggregating humanities scholars and students under one methodological and educational umbrella, especially if we consider that "there are now hundreds of Digital Humanities centres worldwide and the subject is taught at both postgraduate and undergraduate level. Yet the term itself 'digital humanities' is still much debated" and a curriculum in digital humanities is still better served by a complex, multifaceted approach (Terras et al., 2013, p.1).

Ensslin and Slocombe (2012), for instance, present findings from a doctoral training scheme for humanities doctoral students that point to the need to provide future scholars with the tools to deal with the Web 2.0 but, at the same time, also to the increasing tension between the "'convergent' technological processes" and the "diversity of academic practices", even within the humanities and also the "large 'digital (skills) divide'" (p. 154) among the students.

In fact, because of the pervasiveness of technology it is now more difficult, but also more critical and necessary, to separate the training needs of the specialists who want to tackle specific problems or develop specific tools from the general educational needs of the entire relevant student population. This creates a further line of tension between the number and skills of a few digital historians and the numbers, skills and willingness to participate of the majority. 'Mainstream' (used by the American Association for History and Computing (AAHC) 2010 Annual Conference) is the most plausible keyword for the process that would ease this tension by extending digital history to more practitioners. Minuti (2011) uses the word "normal" (*normale,* p.110) and "normal context" (*contesto normale,* p.122), to highlight the fact that this would have a significant effect on how digital history is taught in higher education.

It is however necessary to establish who would be the protagonist of this transformation, when, up to now, the few pioneers have had the responsibility not only to test the boundaries of the discipline, but also to bring it to others, both scholars and students (Minuti, 2011). Very recently, Don Spaeth (Floud et al, 2013) has shown some significant scepticism about the ability of the "missionaries" to "missionize" digital history to the rest of the scholars, considering, as he does, that they are still very much a minority. Ultimately, not even the pioneers who are now well-known in the field of digital history, such as Minuti, Spaeth, Floud and Kelly, "have learned how to do this work [i.e. digital history] in graduate school" (Kelly, 2013, p.125).

Zaagsma (2013) offers a view of the situation of digital history today based on the consideration that "be that as it may, a majority of historians will likely not embark on purely digital projects in the foreseeable future. They will combine traditional/analog with new/digital practices. Indeed, hybridity is the new normal" (§4). His view of a "hybrid practice" (§1) excludes the view of a distinct discipline, but effectively addresses the issue of a new definition of practice.

In terms of specific areas of development for teaching, moreover, teaching specific tools or creating new ones is crucial but not sufficient. Dan Cohen (2004b) indicates three areas that should be developed: "interaction between historians and their subjects, interoperation of dispersed historical archives and the analysis of online resources using computational methods" (Cohen, 2004b, p.293). Other experts point out the importance of archives and data mining (Boonstra et al., 2004, Kelly, 2013), while at the same time, new technologies, such as Geographic Information Systems (GIS) (Martin, 2010) show a strong potential for change in certain domains of historical research and teaching.

Minuti (2011) recommends first of all helping the students to identify and understand the sources and tools available online and to use them critically. In an environment of "abundance" of sources and materials (Rosenzweig, 2003, p.735), as opposed to the traditional situation in the past, where scarcity was the rule, but where the rules themselves of historical preservation and of historical inquiry are being challenged in many different ways, Kelly (2013) believes that students should be given the opportunity to learn "historical thinking" (p.22) according to the known and accepted parameters, but also to "do history", to practise history from the perspective of the historian, and to "make history", to apply their creative capabilities, which can be supported by digital media in a way that no previous teaching/learning tool could offer.

From the above considerations, the conclusions can be drawn that, regardless of whether a discipline of digital history exists, topics to be discussed and taught are available and the digital historians, and those who are particularly interested in teaching, are not short of suggestions on what to teach and why. Nonetheless, without a disciplinary framework of some sort, teaching cannot be sustained across time or for significant numbers of students.

The following section shows how a disciplinary framework and a theoretical framework are linked and should be discussed together, in order to move from individual, or local, experiences to a general overview of the mechanisms, weaknesses and possibilities of digital history as a field of academic endeavour and how this move can be critically facilitated by education and educational theory.

1.3.2 THE NEED FOR A THEORY OF DIGITAL HISTORY

An investigation into the possible developments of digital history in terms of how it could become, or what aspect of it might be, an emergent field in its own right and the implications of this for education can be conducted through a theoretical perspective,

particularly if it values contributions from the field of educational research. This was done for the field of digital humanities by referring to "educational theory to provide a means to analyse, measure, and define the field" (Terras, 2006, p.229), a field that is now "alive and well" (Liu, 2012, p.8), but where more theorizing on the part of the digital humanist themselves (Svensson, 2009) was in the recent past seen as a means to build stronger connections with the humanities disciplines.

Similarly, a theory, or possibly several dialogically connected or even oppositional theories of digital history would play a useful part in describing and defining the field of interest and activity and it would have a specific impact on the potential for creating educational and training programmes.

This issue emerged in Italy for the corresponding field (*Informatica Umanistica*) at the beginning of the past decade (Orlandi, 2007; Roncaglia, 2002), but was largely ignored, the only notable exception being the undergraduate degree in humanities computing at the University of Pisa. As highlighted in the previous section, defining a field and a discipline has very practical consequences, in terms of funding, status in academia and education and training of future scholars and it is therefore a concern worth investigating (Terras, 2006). As Roncaglia (2002) illustrates, with reference to humanities computing in Italy, in the absence of a field, recruitment and promotion on the basis of specific competence is not possible and teaching and research can only be based on temporary transfer of faculty from other assignments or the creation of *ad hoc*, also by definition temporary, teaching posts. This is acceptable for a first, pioneering phase, but unsustainable in the long run (Roncaglia, 2002).

Conversely, a field without a theoretical framework is not viable, as highlighted by German digital historian Manfred Thaller (1989), one of the early pioneers of digital history, recognised by sources in the UK and in Italy alike. As one of the few authors to

have addressed the issue of theory directly, he supports the need for a theory of the 'sub-discipline' he calls "historical computing" on the basis of the need for a framework for discussion on which and to what extend computer technologies can help the historian's work, especially related to the need to establish firm methodological ground to communicate with the technologists in order to adapt the software to the historians' needs.

Today, when the Web 2.0 produces a near complete disappearance of precisely that sort of intermediation, the need for a methodological and theoretical framework for the work of the historians in the digital age appears to be still valid, at least if based on the two other points made by Thaller (1989) in favour of theory building.

The first one is that a theory is needed to guide teaching. Without a conceptual and theoretical base, we risk pursuing the acquisition of teaching skills that are either useless or superfluous in their real world or are not informed by historical science. It is not the place for historians to teach ICT skills but at the same time, it is relevant for them to learn and teach the use of some of these skills for history and, in time, produce changes and influence the development of technology in accordance with their needs. Without a theoretical framework, there can also be no innovation in teaching.

The second is that a theory of digital history strengthens the issue of employability because it addresses the aspects of the historical mind that have more impact on the present, i.e. "those abilities which somehow come as a windfall profit from the classical historical education" (p.9).

At the centre of this process are the digital historians, such as Thaller himself: their role, in the absence of a discipline, is even more under-theorised than digital history itself. Building a framework of understanding of the role of the digital historian in the

profession, in academia and in society, is crucial to relating digital history to historiography and to its future in the training of the new generations.

We go back to two core issues that appear in the digital humanities literature: theory and identity of the practitioner (Svensson, 2009), connected together by the need to better understand an area of scholarly activity, and, even more importantly, to establish training and education for the present and the future in a discipline.

The challenge was launched by Orlandi (2007): while writing a "last" assessment of the situation of humanities computing in Italy, he declares his determination to abandon his role as promoter of principles, such as the establishment and definition of an academic field or fields, considering that this leaves, according to him, most of the academic world "reprehensibly indifferent".[2]

Nonetheless, he remains convinced that something must be done and that he hopes that some young researchers will take to heart the theoretical and methodological side. This thesis addresses this challenge.

1.4 RESEARCH QUESTION

The literature on digital history focuses mostly on digital tools and methodologies for historians to conduct their research and teaching and on their end products.

There has been little consideration of digital historians as reflective practitioners or of their outlook on the development of the discipline and its capacity and potential for education. Particularly in Italy, recent and contemporary conversations among historians, exemplified in the US and the UK by Cohen et al. (2008) and Floud et al. (2013) are absent. Their perspective is what brings together theory (or lack of it) and

[2] "*ultimo è da ritenersi in senso soggettivo, in quanto non ne farò altri [...] rinunciando a propagandare quei principi che pure mi sembrano più che mai validi, ma che lasciano indifferente, mi si lasci dire complevolmente indifferente, la maggior parte del mondo accademico o comunque dei responsabili delle strutture accademiche*".

practice of digital history, and has significant implications for the training of new generations of historians.

The case of Italy is interesting also because of the contrast between the activities of digital historians and the marked lack of structured education opportunities in this field. Considering the role of the digital historians in shaping and developing digital history for the future, the question posed by Boyer, "what does it mean to be a scholar?" (1996, p. 131) can be transformed into:

What does it mean to be a digital historian in Italy, and what are the implications for history education?

The literature presents a scenario of scarcity versus abundance (see *Introduction*, 1.3.1 and 1.3.3) if the case of Italy is considered in contrast with the UK. The comparative element in this study is introduced as a source of illuminative data from that environment.

2. METHODOLOGY

2.1 QUALITATIVE RESEARCH APPROACHES

The choice of methodology is guided by the goal of finding an answer to the research question that will contribute to growth of knowledge in the field, in this case the scholarship of teaching and learning in digital history.

The research question requires an investigation of several different areas, including professional identity, academic discipline and different levels of meaning and definition, which are more consistent with a qualitative study than a quantitative one. The selection of a qualitative approach provides the researcher with a wide variety of possibilities, both at the level of the overall methodology and at the level of the specific methods for gathering and analysing data and drawing conclusions. In this study, a qualitative methodological approach is taken, in order to "study phenomena and processes in their natural setting and […] to make sense of those matters in terms of the meanings people bring to them" (Hallberg, 2006, p.141).

A methodology is required that can relate well to people's experiences and their individual perspectives, while also being able to capture meaning at the individual as well as collective level and the interaction of the participants among themselves and with their social environment.

Four qualitative methodologies were considered: ethnography, phenomenology, action research and grounded theory. These approaches in social science research and in education (Goulding, 2005; Reason and Bradbury, 2008) present several elements that would make them appropriate as a choice of methodology for the study.

First of all, **ethnography** was considered because it offers the possibility of telling a rich and compelling story, a "thick description", a "narrative" (Goulding, 2005, p.299),

from the perspective of the participants, a story that can also be understood as a scientific account. In this case, digital historians, being a numerical minority in a larger, clearly defined group – that of professional historians – could be considered to constitute a group, suitable to be studied from an ethnographic point of view.

Ethnography, rooted in cultural anthropology, aims at a "description and interpretation of the culture and social structure of a social group" (Robson, 2003, p.186) and allows the researcher "to conduct an in-depth study about the phenomenon as it occurs normally in real life" (Aldiabat and Le Navenec, 2011, p.2), thanks to "prolonged direct contact with group members" (Goulding, 2005, p.299). Ethnography is based on insider knowledge of the group and the "native's point of view" (Fetterman, 2008, p.289).

These two elements, however – the study of the culture of a group and the researcher's immersion in the group itself – appear to be potentially problematic for this study for several reasons.

Digital historians in Italy, even if they have contacts with each other, occasionally work together and are able to mention a good number of their colleagues by name, do not constitute a social group because their interactions are limited and unorganised. The initial stages of the research did not reveal any permanent or even consistent *locus* of interaction, such as university or professional institutions, associations, not even shared Web resources or projects that could be construed to play an aggregating social role for those involved in digital history in Italy. Also, and as a consequence, prolonged direct contact with a socially interacting group of digital historians in Italy in a physical location is not a possibility.

There is also an issue related to the output of the research and to the elaboration of the data into a scholarly analysis and a scientific product. Because the ethnographers want to produce a "thick description", a "narrative" (Goulding, 2005, p.299), they have been

criticised for "leaping from description to abstraction" (Aldiabat and Le Navenec, 2011, p.2). The epistemological assumption that the views and the realities relevant for the participants must be portrayed over those of the researcher is crucial in ethnography where the immersion of the researcher (Aldiabat and Le Navenec, 2011) in the group and its culture creates a struggle for objectivity. However, because of this struggle, a higher level of awareness of the difference between these two perspectives and the importance of combining them to provide an interpretation of the data that would advance knowledge emerges.

Nonetheless, some elements of ethnography are very valuable even when it is not chosen as the leading methodology. The emphasis on "cultural meaning" and "cultural sensitivity" (Aldiabat and Le Navenec, 2011, p.2) can shed light on the value of elements such as cultural beliefs, values, attitudes and meanings in social interaction, even when the participants cannot be defined as a group.

Phenomenology as a methodology for qualitative enquiry originated from existentialism in European philosophy and is primarily concerned with the study of the lived experiences and the perceived reality of the participants. Key to understanding a phenomenon is not in the number of individuals with whom the researcher interacts, but on the quality of the understanding related to what the selected individuals have to say (Starks and Trinidad, 2007). In sharp contrast with the group oriented ethnographic approach, "the primacy of the subjective experience is felt to be crucial" (Goulding, 2005, p.303) in phenomenology and the sample can be as little as one single person, if only one person has lived the experience. Coherently, only participants who have directly lived the experience can be heard. The objective is to create a "thematic description" (Starks and Trinidad, 2007, p.1374) "to capture the meaning and common features, or essences, of an experience or event"). Phenomenology helps to "develop an

understanding of complex issues that may not be immediately implicit in surface responses" (Goulding, 2005, p.301). Similarly, in the context of educational research, "there is a resurgence of interest in phenomenology as a philosophy and a research movement in education in response to the complex and complicated phenomena of the world we live in" (Kim, 2012, p.7); phenomenology seems therefore to be particularly useful to bring out the meaning of the lived experience, of its "essences" and structures (Starks and Trinidad, 2007).

Phenomenology, therefore, does not require the participants to be categorized and identified as a social group, which eases the concern expressed above regarding the use of ethnography for this study. It does not require a large sample of participants either, as shown above, because "given that an individual person can generate hundreds or thousands of concepts, large samples are not necessarily needed to generate rich data sets" (Starks and Trinidad, 2007, p.1374).

However, the strong emphasis given to the individual point of view (Kim, 2012 is a perfectly example of this, where one person only is the participant in the study) is challenging. In this study, the area of interest relates to the professional activities of the participants, not to the deeper meaning of their lived experiences, personal identity, ontology of being or life stories. Even though digital historians in Italy are individuals more than they are a group, the level of depth of personal analysis and introspection implied by a term such as "lived experience" is susceptible to create unrealistic expectations about the type of analysis that is to be conducted. Nonetheless, the attention paid by phenomenology to the personal and subjective will not be discarded completely, as there are issues connected with identity and deeply personal outcomes derived from the involvement in digital scholarship.

Action research was considered because it is particularly suited to practitioner researchers. Action research is not a unified methodology, but rather a group of approaches, all based on "a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes" (Reason and Bradbury, 2008, p.4). This methodology combines self-reflection and action in order to transfer research outcomes into changes in the field; action research, which "is always grounded in the values and culture of the participant researchers who engage in it" (Somekh, 2008, p.7), is usually written in the first person by the reflective research practitioner and aimed at effecting change, even though what that change might entail can vary significantly according to the field and context of the research.

This approach is appealing for a researcher investigating her own field because it offers an opportunity to address the concern that change is both needed and desirable. In education, action research has been popular and recently, participatory action research has further emphasizes inclusiveness and the production of useful, practical knowledge, in terms that resonate clearly from critical theory (Teram, Schachter and Stalker, 2005). Action research has, consequently, ethical implications as well as practical goals and they are both directed towards enacting social change and creating liberating effects.

However, recommending change in the field was not a predetermined goal for this study, and thus action research was not selected as the appropriate methodology. Nonetheless, approaches that consider providing recommendations to effect change are valuable as an element of researcher/practitioner reflexivity. Together with action research, **grounded theory** also belongs to a class of "designs for particular purposes: evaluation, action and change" (Robson, 2003, p.212).

However, the main reason for considering grounded theory for this study was the fact that, while the literature indicates the need for the formulation of theory in digital

history, none of the previously mentioned methodologies aims specifically at this. **Grounded theory**, on the contrary, was invented ("discovered" would be a more appropriate term) in the late 1960s with the explicit purpose of supporting the formulation of theory from qualitative studies in the social sciences (Glaser and Strauss, 1967), especially in under-theorized fields "with sparse amount of literature" (Glaser, 1992, p.32).

Grounded theory was the product of a reaction against the dominant paradigms of science research (quantitative and experimental-deductive) as it was transferred from physical and natural science to the social sciences. Glaser and Strauss reacted against what they perceived to be the excessive authority of contemporary theorists (Glaser, 1998) on research agendas as well as the bias in favour of quantitative, theory-testing research methods. The first field of inquiry of grounded theory was health but education has also embraced grounded theory as a useful tool for the practitioner/researcher. Grounded theory provides a solid scientifically based methodological support, a "highly developed, rigorous set of procedures" (Butterfield, 2009, p.316), for the inductive generation of theory with a qualitative analysis and qualitative data, which makes it a good tool for research in this study.

Grounded theory derives from two epistemological traditions, namely symbolic interactionism of the Chicago School and (American) social pragmatism, represented respectively by Blumer and Mead (Corbin and Strauss, 2008). Symbolic interactionism focuses on the interpretation by human beings of each other's actions and their consequent actions/reactions, based on that interpretation and the meaning attached to it, while pragmatism posits that knowledge is created through action and interaction in a social context, where a problematic situation cannot be solved by automatic response and must therefore engage reflecting thinking and action by the individual. Pragmatists

highlight the collective knowledge created by these interactions – based on problem solving. Pragmatism and symbolic interactionism contain principles that are illuminative for the case at hand and their integration into grounded theory further strengthens this methodology's suitability for the study.

The grounded theory researcher aims at discovering what the main concern of the participants is and how they attempt to solve it. The participants in grounded theory research are the main source of data and ultimately of the theory, which emerges inductively (hence the terms, "emergent" categories and theory) from a systematic comparative analysis of the data, thanks to the scientific abilities of the researcher and the rigorous application of the method.

Grounded theory also highlights the perspective of the individuals and groups who are at the centre of the social phenomena under investigation. It gives a voice to the protagonists but also to the researcher, by encouraging her to develop a new theory, "grounded" in the data gathered for her own study.

Guthrie (2009) stresses that participants have "great involvement in resolving their main concern, [but] seldom have a conceptual perception of it as a Grounded Theorist does" and that grounded theory is useful for "unlocking the conceptual understanding of practitioners" (p.35). In the case of this particular study, most of the participants are researchers and scholars, so they are used to and able to develop their own theoretical frameworks. What they do not often do, and what remains therefore open to inquiry, is to reflect on and write theory about themselves as digital historians.

Grounded theory uncovers basic social processes and offers the protagonists of these processes a theoretical framework for understanding them from their own practitioner perspective (Glaser, 1998) and tools for handling real-life problems within those processes: this is the reason why it is so popular with practitioners in the fields of

business, health and education. Timmermans and Tavory (2007) provide a specific analysis of the significant increase in the adoption of grounded theory in the social sciences after the 1990s, when Strauss and Corbin (first edition 1998, second edition 2008) employed their efforts to produce a handbook for doing qualitative research with grounded theory.

The outcome is a mid-range grounded substantive theory; mid-range because the theory is not so abstract as to lose the connection with the data and not so specific as to lose explanatory power and substantive because it is grounded in and emerging inductively from the actual field under study. Grounded theory focuses on "intermediate social phenomena" (Gibson, 2007, p.437), i.e. the perspective of the individual on society and social processes. The challenge of conceptualization is "to account for variations" (p.438) in the individual concerns.

The theory must fit the data, work to solve the participants' main concern, and be relevant in that area of interest (Glaser, 1998). The substantive theory, because of its abstraction and conceptual explanatory power, can then be developed into a theory for another substantive area or a formal theory that would be applicable to several different areas on an even higher level of abstraction. A formal grounded theory is defined by Glaser (2007) as "a theory of a SGT [*substantive grounded theory*] core category's general implications, using, as widely as possible, other data and studies in the same substantive area and in other substantive areas" (p.99).

To summarise, grounded theory is the most appropriate method to use to answer the research question:

1. Because of the lack of theory in the field of digital history and digital historians and the recognised need for one;

2. Because it allows for the viewpoints and concerns of the digital historians, individually but also in communication with each other and in their social context and interactions, to be heard and systematically analysed;

3. Because it is well suited to the research conducted within a qualitative research perspective by a practitioner/researcher because it provides credibility and scientific rigor to the process without constraining the output with a predetermined framework that could hinder the potential for generating action and change;

4. Because the philosophical principles on which it is based, pragmatism and symbolic interactionism, are characterised by a substantially realist ontology and positivist/inductive epistemology, both of which are particularly well suited for a historian as the researcher and also for historians in Italy as an audience for the research outcome.

Nonetheless, further discussion is necessary because grounded theory has developed through the decades into various currents and versions and it is important that the methodology is chosen and adopted in specific terms.

2.2 GROUNDED THEORY: DIFFERENT TRADITIONS AND CENTRAL FEATURES

Having identified grounded theory as the methodology for this study, it is afterwards necessary to choose one approach among the "family of methods claiming the GTM [grounded theory method] mantle" (Bryant and Charmaz, 2007, p.11), which differ both in epistemology and methods to make clarity in the process and the outcome (Heath and Cowley, 2004; Hallberg, 2006).

Three versions of grounded theory were considered for this study, *classical* grounded theory, Strauss and Corbin's approach and *constructivist* grounded theory.

Classical grounded theory only allows theorising as a goal, making "theoretical sense of common sense" (Glaser, 1978, p.14) at a level of abstraction that makes the outcome transferable, while Corbin and Strauss (2008) allow for objectives other than theorisation, such as description and conceptual ordering.

Classical grounded theory also rejects the Paradigm model, the framework for data analysis created by Strauss and Corbin (2008), as "forcing" of concepts onto data, in contrast with the "emergence" of concepts from data according to an inductive procedure.

For the purposes of this study, classical grounded theory appears a better fit by upholding theory development as an objective and by allowing more openness in terms of the emergent theory itself, thanks to the absence of a predefined paradigm.

Constructivist grounded theory, related to the development of constructivist positions in other social sciences, including education (Charmaz, 2007a,b, 2010), stems from a postmodernist tradition, and is therefore at odds with the pragmatist and positivist connotations of grounded theory in its original formulation, especially in terms of the role of the researcher and her relationship with the participants in the creation of meaning and the construction of knowledge (Goulding, 1999).

Classical grounded theory does not deny the individuality of the researcher or the risk of personal bias ("it is a fantasy for the researcher to think he/she is not a part of the data", Glaser, 1998, p.49), but provides direction and guidance to incorporate both into the process from whatever philosophical perspective the researcher herself decides to apply to her work. Overall, it still upholds an empiricist/positivist attitude, exemplified in a suggestive, if strong, assertion: "the world exists; it will not go away even if it does not go your way" (Glaser, 1998, p. 116).

In this aspect, classical grounded theory appears to be more flexible than constructivist grounded theory because it allows the researcher to maintain a non-constructivist philosophical stance and to state and analyse this choice as another aspect of the research data. Moreover, classical grounded theory has "survived" the post-modernist turn, exemplified in this case by constructivism, in a manner that is not dissimilar from how historiography has dealt with the same issue by maintain a firm hold on "empiricism and rational analysis" (Munslow, 2001, §5), but without ignoring the reflexivity issues and the crisis of authority brought up by post-modernist critique (Clarke and Friese, 2007). Therefore, classical grounded theory is preferred to constructivist grounded theory in this study.

The adoption of classical grounded theory, in sum, responds to three considerations:

1. Overall objective of theory formulation rather than qualitative description;
2. Coding/analysis methods not guided by pre-existing paradigms;
3. A general positivist/empiricist approach.

The use of classical grounded theory (Glaser, 2010) is characterised by a risk connected to the tension between fear of one's own creativity in producing new theory and the appeal of stopping the analysis when an interesting core category, the focal point of the theory (Glaser, 2010) emerges, and stopping short of a full, working theory. This challenge was addressed in this research by pursuing methodically the process of constant comparison (Glaser, 1992), see below Table 1 point 4, which is the process that allows concepts and theory to emerge from the data, by a systematic spiral movement of analysis between data and emerging concepts.

Classical grounded theory was adopted in this study not primarily because of the creative potential of discovering new ideas *per se* ("most ideas are already known in some way", Glaser, 1992, p.29), but to explore the connections between the various

elements of the data, aimed at shedding new light on the development of digital history and digital historians in their professional context.

Some of the specific requirements of classical grounded theory are not entirely in agreement with the expectations of study at doctoral level. Specifically, literature reviews in the substantive field and the formulation of research questions should be kept to a minimum until the analysis and the formulation of the theory are well under way. This is meant in cautionary terms, to remind the researcher to remain open minded and free from awe towards existing theories and their conceptual grab, e.g. their evocative power based on the strength of the recognition given to existing and well-known works.

This risk was kept under control during this research by the scarcity of existing theories on digital history and the digital historian, but also by the parallel analysis of literature in the fields of history as well as education, which helped keep up the researcher's theoretical sensitivity (Glaser, 1998), while both contributing to a better understanding of the issues at hand and helping to diminish the risk of addressing a preconceived problem in either field.

Classical grounded theory, while warning against the intellectual power of existing theories, also implies "advanced understanding of different schools of thought [especially in sociology], their terminology, and their possible relations" (Kelle, 2007, p.203). In this study, my previous training in fields other than history and education, including sociology, philosophy and political science, has undoubtedly supported the analysis process in the absence of a predefined conceptual structure.

In relation to a research question, caution is also recommended by classical grounded theory in order avoid preconceived ideas and received concepts (Glaser, 1992). This recommendation was followed in this study by a continuous focusing and refocusing,

where necessary, on the participants' main concern and their strategies to resolve it. Accordingly, the research question has undergone a series of modifications and adaptations in response to what was emerging from the data.

The central features of grounded theory are represented in Table 1.

TABLE 1 – CENTRAL FEATURES OF GROUNDED THEORY

1. Theoretical sampling	This is a non-probability sampling procedure guided by the concepts emerging from the data in a spiral motion: "the analyst jointly collects, codes and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (Glaser and Strauss, 1967, p. 45). As such, theoretical sampling is partially deductive – going from the analysis to the data rather than only inductive, from the data to the analysis.
2. Coding	Coding is the core process in the analysis that allows the researcher to conceptualise the data. **Substantive coding** identifies the substantive codes (categories and their properties and dimensions) and the **core category**, which represents the main concern of the participants and the key element of the theory. A property of a category is an attribute of that category and a dimension is a degree of variation of that property. **Theoretical coding** conceptualises how the substantive codes relate to each other as hypotheses within the emerging theory.
3. Memoing	Memos are pieces of writing done by the analyst during the research process to write-up ideas about the formulation of codes and categories and their relationships.
4. Constant comparative method	This is the process of analysis that compares data to identify similarities and differences that lead to the emergence of codes. Constant comparison extends to all steps of the analysis, from the initial coding to the comparison of the generated theory to relevant literature and to data from other areas.
5. Saturation	Saturation occurs when new data does not bring any new information to the analysis. At the point of saturation for each category or property/dimension the researcher believes that "this concept is sufficiently well developed for the purposes of this research and accepts what has not been covered as one of the limitations of the study" (Corbin and Strauss, 2008, p. 149).
6. Grounded theory	The theory that emerges from the analysis using grounded theory. It can be represented discursively in a text or diagrammatically. A grounded theory is substantive if it relates to a delimited problem in a particular area or formal when it "cuts across several substantive areas" (Bryant and Charmaz, 2007, p. 608) at a higher level of abstraction.

A grounded theory can be judged by four criteria (Glaser, 1978):

1. it must fit the data in the field;

2. it must work, i.e. it must be able to explain the main concern of the participants and how they attempt to solve it;

3. it must be relevant for the field under study and most importantly for the participants;

4. it must be modifiable, in the sense that new, diverging data is not seen as a disproof on the theory, but just an analytical challenge. Glaser (1998) claims that "since theory is readily modifiable, it cannot be wrong" (p.17). This element highlights the opportunities for revision and improvement of a theory by further comparison with other areas and cases over the testing/verification approach of a theory with a fixed and definitive structure.

These criteria are interrelated and work on the basis of the inductive "continuous cycle of collecting and analysing data" (Elliott and Lazenbatt, 2005, p.50) and the progressive nature of the data collection and analysis, based on theoretical sampling and constant comparison. The "credibility" or "plausibility" of the findings (Corbin and Strauss, 2008, p.311) is the corner stone that ensure the criteria are met and the research is of a "quality" (p.48) that makes it valuable not only scientifically and epistemologically, but especially for professional practice. Corbin and Strauss (2008), by stressing the importance "credibility" or "plausibility", offer the researcher the opportunity to show that the process she followed was sound and solid throughout the research work. Because constant comparison extends from the first coding of the data to comparing a substantive theory to data from another field, grounded theory methodology is built on a comparative strategy that works well with the assumption

that research work across substantive areas is worthwhile. As such, constant comparison can be seen as the core category of grounded theory (Hallberg, 2006).

In this study, this comparative strategy is applied when the substantive theory that emerged from the analysis of the Italian data is compared to data emerging from interviews with historians working in the UK (see section 3.5). The literature also presents a scenario of scarcity versus abundance (see *Introduction*, section 1.3.1 and 1.3.3) if the case of Italy is considered in contrast with the situation in the UK. A comparative element is introduced in the analysis not in the form of another or a different research question, but as an illuminative source of data from a different environment, where a similar research question can be asked.

2.3 DATA COLLECTION

Classical grounded theory maintains that "all is data" (Glaser, 1978, p.57) but the researcher must look at the field, by observing and interviewing (Glaser, 1992) as the core data collection activity, since the problem must always be seen "from the point of view of the actors involved" (Glaser, 1998, p.115), in order to explain "how the participants continually resolve their main concern" (Glaser, 1998, p.55).

The participants in this study are digital historians and the field their professional environment; observation was conducted only to identify online digital history projects and therefore identify their creators, who were then interviewed. Digital historians were identified observing their work in digital history, based on the definition adopted for this study (Heppler, 2013), i.e. historians who had used digital history as a methodology to aid historiography, created tools that allow for initiatives that would not be possible otherwise and shown an openness to present and disseminate historical knowledge in new ways and to new audiences.

The sampling procedure was guided by theoretical sampling (Keen, 2013; Breckenridge and Jones, 2009, Glaser and Strauss, 1967, table 1 point 1): this included, where necessary, asking interviewees to indicate other digital historians or humanists who might be able to shed light on specific aspects of the research.

The data collection consisted of three elements, (1) A pilot study (2) The main study of digital historians in Italy (3) comparative study of digital historians in the UK to illuminate the main study. The following sections (2.3.2 and 2.3.3) discuss in detail the data collection procedures. Section 2.3.1 deals with research ethics. In the text of this study, the data in Italian is presented alongside the English translation.

By drawing from the interviewees' social network, both formal and informal, the study also has highlighted some of the connections that exist among digital historians, through participation in common projects but also simply by mutual reference through websites, blogs and social network connections. This element is highlighted in the substantive theory (3.4), because it represents an important aspect of what it means to be a digital historian, especially in Italy where a professional association or group for this purpose does not and has never existed.

2.3.1 ETHICS

Anonymity in the interviews was established to ensure that no sensitive and personal data on the participants emerged from the research work. Also, with anonymous data the reader is less able to be influenced by an association with a specific role, for instance in academia, or a specific digital project. Moreover, because the community of digital historians in Italy is not very large, identification of the respondent for an Italian reader familiar with the field would have been very easy even with few generic elements, such as association with a specific University.

All respondents are indicated in the study with a code that identifies the country where the respondent works (IT and UK) and a letter, which represents the order in which the data was collected (IT-A was the first respondent for Italy, UK-A the first for the UK).

All data from the interviews are kept in a secure mode, on a password-protected personal laptop as well as on a password-protected external memory drive, neither of which are accessible to other users or linked to a public network. Transcripts can be provided to the respondents on request. Full transcripts on the interviews in the main study are not included within this thesis, although extracts appear in the Appendices.

Ethics approval was sought and obtained on May 10, 2012 (Ref HREC/2012/#1196/1) from The Open University Human Research Ethics Committee.

2.3.2 PILOT STUDY

A pilot study fits with the iterative nature of analysis and data collection phases in classical grounded theory.

In this research, a pilot study was conducted to test:

1. the use of language for data gathering and analysis, specifically Italian versus English;
2. data-gathering techniques, in particular written communication in the form of a structured questionnaire and structured, non-iterative, email interviews.
3. the topic areas used to interview the participants.

The pilot study was based on a structured questionnaire in two cases and shorter email interviews in two more cases. The data from the pilot study are reproduced in Appendix 1. Four historians were interviewed.

Selecting the initial participants responded to the consideration, expressed in the context of classical grounded theory methodology, that “sampling begins as a ‘common

sense' process of talking to those informants who are most likely to provide early information" (Goulding, 2005, p.296).

The first interviewee, IT-AA, was identified through a well-known digital history project they had created, while the second interviewee, IT-BB, was selected on the basis of personal knowledge, also through a digital history project. They are both academic historians.

The participants interviewed by email were selected on the basis of familiarity with the issue of the role of non-academic historians in digital history. Moreover, I had also worked with IT-CC in projects involving digital history and e-learning and was referred to IT-DD by him.

TABLE 2 - PARTICIPANTS IN THE PILOT STUDY

	Code	Role	Type of data	Language of questions/responses
1.	IT-AA	Senior academic historian	Questionnaire	English /Italian
2.	IT-BB	Early career academic historian	Questionnaire	English / English
3.	IT-CC	Independent historian; journal editor	Email inter.	Italian / Italian
4.	IT-DD	Independent historian; writer	Email inter.	Italian / Italian

1. Use of language

The use of language, English versus Italian, in the data gathering was tested. The questionnaire was written in English, on the basis of the language in which this thesis was to be written up but the option was offered to the respondents to write their answers in English or Italian. One interviewee decided to answer in Italian, despite not requiring a translation of the questions. Also in the case of the interviewee who replied in English, the brevity of the answers left open the possibility that they might not feel completely at ease discussing this topic in writing in a foreign language. For example, the questionnaire answered by IT-AA in Italian contains a total of 1759 words, while

the questionnaire answered by IT-BB in English does not even reach half of this length. Furthermore, the email interviews were conducted in Italian, because the interviewees, when asked, both revealed that they were not comfortable with reading or writing in the English language at all.

These difficulties prompted a change in strategy, whereby Italian was used in all successive communication with the Italian participants and the translations were left to the analysis. This made the analysis work more consistent and the writing up of the work more controlled.

2. Data gathering techniques

The questionnaire was chosen initially as a method of data collection in order to allow for an asynchronous form of communication for the convenience of the interviewees and for easiness ease of analysis of the already written text, but also for the purposes of presenting standardised questions to the participants. The email interviews did not use the same questions of the questionnaire, but included questions that the interviewees were deemed particularly suited to answer, in accordance with the principle of theoretical sampling (see Table 1).

Table 3 (next page) presents the questionnaire questions.

TABLE 3 - QUESTIONNAIRE QUESTIONS

1.	How would you define digital history?
2.	Would you say digital history has brought or is bringing changes to the profession of historian? If yes, would you describe these changes as innovation and how do you evaluate this innovation?
3.	Would you say there are aspects of digital history that are innovative while others are not?
4.	How do you evaluate the so called Web 2.0? Does it represent a new phase in the relationship between historians and the Web? If yes, do you think this is the phase when most historians will adopt Web and internet technologies in their work?
5.	Would you say a considerable number of historians have been affected in one way or the other by digital history or it has remained confined to a limited number of "experts" and "specialists" such as yourself?
6.	The 2010 Annual Conference of the American Association for History and Computing was going to be called "Digital History Goes Mainstream". Do you think it is time for digital history to go mainstream? How do you think this process would take place?
7.	How would you describe your theoretical position as a historian?
8.	Do you think there is a relationship between the theoretical position of an historian and her/his approach to technology for teaching and learning?
9.	What are your specific areas of expertise in the study of history? Do you think they affect your approach to digital history?
10.	Do you believe there are any significant differences in the understanding, use and evaluation of digital history by different sub-disciplines within the field of history?
11.	How and why did you start working with computers in your professional life? How has your involvement with digital history evolved over time?
12.	Do you use digital tools and methods more in your research or your teaching?
13.	What is your relationship with the computer experts? Have you become one yourself? If so, was it because it made logical and practical sense or because you felt you had no choice?
14.	Do you think the new generations of historians receive any training in digital history?
15.	Should they?
16.	Do you think there is an actual discipline "digital history"? Is there an epistemic community of digital historians? Do we need either for the present and future of the profession?
17.	How would you describe the relationship between digital history and the digital humanities? Is digital history a branch of the digital humanities?
18.	Are you familiar with any significant differences in how digital history is viewed and used in various countries? Is there, in your opinion, an international discussion on digital history across countries and languages?

However, it was found that the benefits (standardisation, asynchronous communication, and written data) of the questionnaire were outweighed by the disadvantages. First of all, most questions were quite complex and directed the answer too narrowly, not allowing the interviewees enough freedom to express their views and to offer insights and ideas beyond what the specific questions suggested.

For example, question 6 referred to the activity of the American Association for History and Computing and their use of the term "mainstream" within a specific context on which the interviewees were asked to comment without any discussion or possibly knowledge of this context.

Secondly, most questions contained specific concepts, originating in the literature, such as "innovation", "mainstream", even "digital history", whose definition was taken for granted and not discussed in the context of the data gathering. This kind of structured question compelled the participant to react to inputs from the interviewer rather than express their own views on the topic in a largely unmediated way.

Thirdly, the written communication made iteration or further questions on an interesting topic impractical if not impossible. For example, IT-BB replied to question 3 (asking whether they thought there are innovative and not so innovative aspects of digital history) with a "yes", which is clearly disappointing from the point of view of data gathering in a qualitative study.

All these elements ended up posing a serious risk *vis à vis* the purpose of classical grounded theory methodology to allow the emergence of the theory from the actual concerns and solving strategies of the participants.

The email questionnaire did not present the issues related to standardisation and formulation of the questions, however, it showed the same pitfalls in terms of posing

questions that were too narrow or too specific and the lack of iteration. It also showed that applying the strategy of theoretical sampling by asking only the questions that were related to the specific area those participants were deemed to be able to contribute particularly well to deprived the study of the opportunity to develop other areas that might be of concern to those participants and relevant to the study overall.

To counteract the disadvantages of these methods, the structured nature of the questionnaire and email interviews was replaced by methods that are more in line with classical grounded theory methodology, chiefly synchronous, semi-structured interviews.

3. Topic areas

The questionnaire and the email interviews were structured around four areas that emerged from the research interest and from the literature review: digital history, personal experience as a digital historian, relationship with other historians, training and education. Even though the main aim of the pilot study was to test data-gathering methods, analysis of the responses highlighted several elements that offered a solid starting point for the analysis, especially the respondents' motivation to do digital history, and the associated challenges that they encountered in their professional environment. Another area of interest was extending participation in historiography from academia towards the general public and vice versa. Therefore, the four areas were addressed again by the main study.

In terms of data collection, while the questionnaire had the benefit of addressing all four interest areas, the email interviews proved too narrow by concentrating only on the original reason, based on theoretical sampling, for contacting IT-CC and IT-DD, i.e. their experience as non-academic historians. Nonetheless, they did offer comments with an ampler point of view, but this approach is too risky, especially considering that

the reason for doing an email interview in the first place was they would not be seen as time consuming and would therefore encourage participation from people who might be too busy to participate in spoken interviews and therefore an iterative process would have gone completely in the opposite direction.

Finally, the semi-structured interviews of the main study shifted attention from definitions (see questions 1 to 3 in Table 3, above) of digital history, digital historian, innovation, to the personal perspective, asking the interviewees to begin by describing and explaining their experience with digital history in an open-ended manner. The hypothesis, confirmed in the main study, was that a more open approach would result in a higher heuristic power and more developed considerations by the participants.

2.3.3 MAIN STUDY

The main study was conducted on the basis of the lessons learned in the pilot study, in terms of

1. use of language, whereby Italian was used with all Italian interviewees;
2. data gathering techniques, i.e. questionnaires and written email interviews were replaced by semi structured phone interviews, not based on a strict set of questions, but on the four areas used in the pilot study, with a combination of specific questions together with openness for topics to emerge spontaneously (Glaser, 1996);
3. topic areas, by starting with personal experience and avoiding explicit requests for definition of given concepts in favour of a more open contribution.

Theoretical sampling was continued in the main study (see Table 1 point 5) in the continuous interactive process between data gathering and data analysis that is typical of grounded theory.

Table 4 shows the general structure of the semi structured interviews, for both Italian and UK interviewees. These questions were put to all participants, in the same or similar order. Any variation was prompted either by the specific area of expertise of the interviewee or by their responses during the interview.

TABLE 4 - MAIN INTERVIEW QUESTIONS, TOGETHER WITH THEIR ENGLISH TRANSLATIONS.

Come descriverebbe la sua personale esperienza nell'ambito della storia digitale?	How would you describe your personal experience in digital history?
Quali sono le difficoltà principali nel fare storia digital in Italia?	What are the main difficulties in making digital history in the UK?
Quale pensa sia l'atteggiamento degli altri storici italiani nei confronti degli storici digitali e di quello che fanno?	What do you think is the attitude of the other historians towards digital historians and what they do?
Quale pensa che sia il ruolo degli storici non accademici e degli appassionati nel fare storia con le nuove opportunità offerte dalla storia digitale?	What do you think of the participation of non - academic historians and amateurs in making history with the new opportunities offered by digital history?
Pensa che ci sia un legame fra la storia digitale e il ruolo sociale ed educativo dello storico?	Do you think that there is a connection between digital history and the social and educational role of the historian?
Quale formazione ricevono o dovrebbero ricevere le nuove generazioni in Italia in relazione alla storia digitale?	What training are the new generations receiving or should receive in relation to digital history in Italy?

In procedural terms, transcription is not deemed essential in classical grounded theory (Glaser, 1992), but in this study, due to the use of two working languages, in order to facilitate the analysis all interviews were fully transcribed. Examples are attached in Appendices 2 and 3.

The main study has two parts. The first part, which is central to the study, consisted of the collection and analysis of interviews with Italian digital historians. The second part was designed to provide elements of comparison with the substantive theory emerging

from the Italian data and it consisted of interviews with digital historians and humanists working in the UK.

2.3.3A DATA GATHERING IN ITALY

All interviewees were identified on the basis of theoretical sampling, but the general criteria for inclusion in this part of the study were:

1. being a university-trained historian;
2. working in Italy, whether inside or outside academia;
3. being directly involved in digital history projects, as an initiator or participant.

There are three professional groups in the interview sample: academic historians at various career stages (including early career researchers and senior academics), librarians and non-academic historians, including both independent historians and historians working outside academia. The participants belong to 10 different Italian universities.

It is important to note that there are no purely *amateur* historians in this study: meaning individuals who, despite being involved in researching and writing of history, do not have formal training in historiography. In the words of one of the interviewees, IT-C (see below table 5) "they do not have the necessary coordinates to do historical research".[3] The lack of training is the reason why this group was not included in this study, not because of a negative evaluation of their potential contribution to the field, and to digital history in particular, but because they were not trained in history in higher education, which is the focus of this work, their contribution must be considered separately, especially in relation to the training of future (digital) historians. The topic of *amateur* historians has emerged in the data, though, and will be discussed in the analysis from the perspective of the digital historians who have mentioned it.

[3] *"li chiamo così perche' non hanno quelle coordinate necessarie per la ricerca storica".*

Table 5 below presents a summary of the final sample for Italy. The variation in length in the phone interviews is a direct consequence of their semi-structured nature and of the opportunity given to the interviewees to express views and discuss topics beyond what was asked directly.

TABLE 5 - INTERVIEWEES IN ITALY

	Code	Role	Type of data	Approx. duration
1.	IT-AA	Senior academic historian	Questionnaire	n/a
2.	IT-BB	Early career academic historian	Questionnaire	n/a
3.	IT-CC	Independent historian; journal editor	Email inter.	n/a
4.	IT-DD	Independent historian; writer	Email inter.	n/a
5.	IT-A	Early career academic historian	Interview	1 hour and 10 min
6.	IT-B	Senior academic historian	Interview	40 min
7.	IT-C	Early career non-academic historian; librarian	Interview	50 min
8.	IT-D	Researcher; digital humanist/historian	Interview	44 min
9.	IT-E	Early career historian; librarian	Interview	2 hours
10.	IT-F	Senior academic historian	Interview	1 hour and 40 min
11.	IT-K	Independent historian; journalist	Interview	45 min
12.	IT-L	Senior academic historian	Interview	55 min
13.	IT-M	Senior academic historian	Interview	40 min
14.	IT-N	Senior academic historian	Interview	38 min
15.	IT-O	Senior academic historian	Interview	1 hour and 47 min
16.	IT-P	Senior academic historian	Interview	1 hour and 34 min
17.	IT-Q	Librarian; senior academic historian	Interview	1 hour
18.	IT-R	Early career academic historian	Interview	1 hour and 25 min

Italian was used in this data gathering, in accordance with the conclusions drawn from the pilot study (see above section 2.3.2).

2.3.3B DATA GATHERING IN THE UK

In order to compare and contrast selected elements of the substantive theory based on the Italian case and also to offer some elements towards a formal theory (see definitions in Table 1 point 6), a further 10 interviews were conducted with historians and humanists in the UK; analysis of this data is presented in section 3.4. Data analysis in

the UK was conducted through selective coding only, on the basis of the core category *developing digital history* (see below section 3.3), identified in the Italian study.

Data in the UK were collected on the basis of theoretical sampling, but differed from the Italian case because the first interviewees were identified due to their membership of the UK Association for History and Computing. This is relevant not only as a term of contrast with Italy, where this research tool was not available, but also because it signals an immediate positive and "official" identification with the field, which is also lacking from the experience of most Italian digital historians. All interviewees have academic training in history, including IT-F, who works in digital humanities.

TABLE 6 - INTERVIEWEES IN THE UK

	Code	Role	Type of data	Approx. duration
1.	UK-A	Senior academic historian	Interview	1 hour
2.	UK-B	Senior academic historian	Interview	22 min
3.	UK-C	Senior academic historian	Interview	51 min
4.	UK-D	Senior academic historian	Interview	33 min
5.	UK-E	Early career academic historian	Interview	47 min
6.	UK-F	Senior academic (digital humanities)	Interview	56 min
7.	UK-G	PHD student	Interview	37 min
8.	UK-H	Senior academic historian	Interview	41 min
9.	UK-I	PHD student; IT specialist	Interview	49 min
10.	UK-J	historian; library specialist	Interview	32 min

2.4 DATA ANALYSIS

Data analysis was conducted according to the principles of classical grounded theory, through the interconnected processes of coding and memoing, which combined allow the researcher to inductively and systematically generate theory from data (Glaser, 1978, 1992). The following sections discuss coding, memoing and writing up.

2.4.1 CODING

Coding was conducted in two stages (see table 1 point 5 section 2.2): substantive coding and theoretical coding. They follow the same procedure, based on constant comparison and theoretical sampling.

Substantive coding identifies the relevant elements in the data called indicators; indicators are compared to each other and in this comparison concepts/conceptual codes start to emerge and they are either a "category" or a "property or dimension" of a category (Glaser, 1978, p.55). Further comparison occurs among indicators and between indicators and emerging concepts until saturation, when further indicators add nothing new to the concept/conceptual code. This process is the "concept/indicator model" (Glaser, 1978, p.62), applied to all substantive coding. Figure 1 is adapted from the same source.

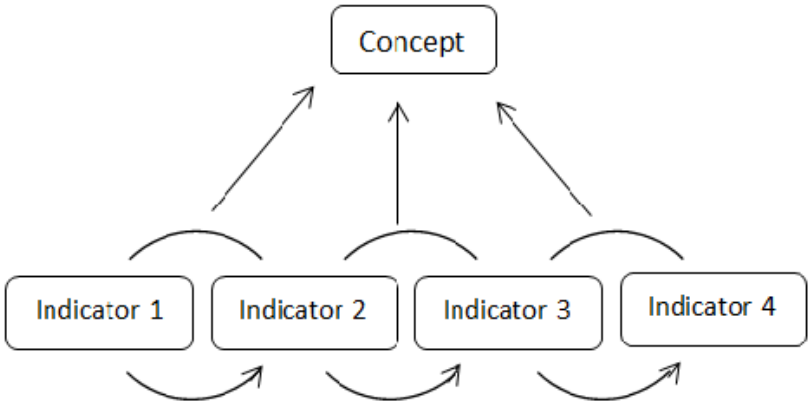

FIGURE 1 - CONCEPT INDICATOR MODEL

Figure 2 (next page) presents an example of the use of the model for the category "affective benefits".

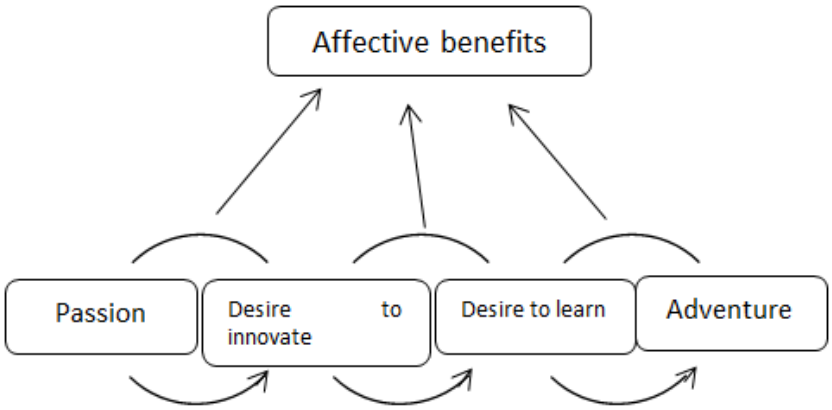

FIGURE 2 - EXAMPLE OF THE CONCEPT INDICATOR MODEL

Substantive coding is guided by three general questions:

1. What are the data a study of?
2. What category/property does this indicator refer to?
3. What is actually happening in the data?

There are two possible sources for the actual words that are taken as concepts/conceptual codes, i.e. sociological constructs or *in vivo* words, derived directly from the words used by the interviewees.

In this study, the data in Italian was coded directly in English; therefore the translation process occurred at the time of coding, while the data and the indicators remained in their original form, i.e. in Italian. When the use of *in vivo* words was deemed necessary, they are kept in Italian in the coding but an English translation is always provided for easy reading. In few cases this has proven necessary, for example for the word *appassionati* (a word that has elements of both the English "enthusiasts" and "amateurs") to highlight a different nuance in the Italian word as compared to the English word. When the concept is saturated, the indicators are interchangeable, i.e. they are shown through constant comparison among themselves and with the concept

they point to, to indicate a fundamental uniformity, to show a pattern (Glaser, 1978). The conceptualization of this pattern is the actual concept.

Substantive coding has two sequential stages: open coding and selective coding. The move from open coding to selective coding happens when the researcher starts focusing on the core category, which is the central focus of the theory, and the analysis is increasingly shaped by the core category and its supporting subcategories.

The core category represents the basic social process at play in the situation under analysis and also the way the participants "continually resolve their main concern" (Glaser, 1998, p.55), this is why often the core category in grounded theory is expressed in gerund form, because it refers to a process/action put in place by the participants. Figure 3 below presents the analysis process in summary view.

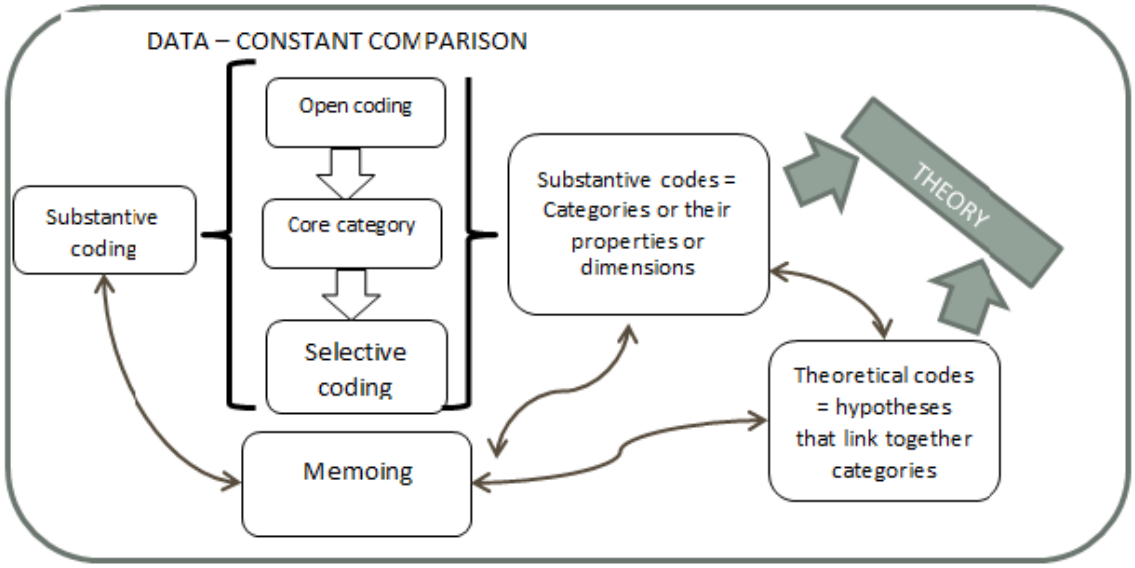

FIGURE 3- SUMMARY OF THE ANALYSIS PROCESS

Table 7 provides an example of the coding process in this study. Indicators are highlighted in the text. The English translation is provided for reference only: the transcription and coding were carried out in Italian.

TABLE 7 - EXAMPLE OF THE CODING PROCESS

Interview transcript IT-A Italian (excerpt)	*Substantive codes (categories or properties/dimensions)*	*English translation*
[...] noi due, molto appassionati di internet e dell'idea di creare, di usare internet e i contenuti digitali in una maniera completamente differente, creare contenuti ad hoc che avessero delle caratteristiche specifiche di un certo genere e che si indirizzassero a un pubblico più eterogeneo, abbiamo pensato alla formula del blog che ci dava anche da un punto di vista metodologico, e proprio di impostazione metodologica la possibilita' di creare dei contenuti in un certo senso più istantanei.	*Being passionate (property of motivation to do digital history)* *Widening audiences (property of widening participation)*	*On the contrary, for us two, as people who are very passionate about the internet and the idea of creating digital content in a completely different manner, to create ad hoc content that would have certain characteristics and aimed at a more diverse audience, we decided to create a blog, because it gave us, also from a methodological point of view, an opportunity to create more "instantaneous" content in a way.*

After substantive coding, theoretical coding is conducted, always through the processes of constant comparison of the data and the emerging categories, but "mainly by sorting and integrating [the] memos" (Glaser, 1978, p.56).

Theoretical coding is both essential to the formulation of the grounded theory and also of paramount importance in evaluating the contribution of the theory to science, since it is in making new connections among concepts that the researcher can have the most impact in her field (Glaser, 1992). "Without theoretical codes, the substantive codes become mere themes to describe (rather than explain) a substantive area" (Hernandez, 2009, §12).

The theoretical codes are useful to increase the validity of the theory by making explicit links to accepted sociological, philosophical or other, for instance, educational theories and constructs that are known to the researcher in her or related fields, always based on

the assumption that theoretical codes must "earn" their position within the theory by constant comparison.

2.4.2 MEMOING

Memoing plays an important role in the analysis because it helps the researcher to delineate her own thoughts, connections among codes, general observations, emerging categories. They become progressively more focused and more precise with the advancement of the analysis and are crucial to help the researcher clarify her thoughts and elevate them to a specific role in the analysis without leaving them implicit in the reasoning, which would greatly increase the risk of making assumptions and injecting personal judgements with no grounding in the data. Memos are sorted and organized during the analysis and they contribute to the writing up (Glaser, 1978). Memoing in this study was done completely in English, for reason of coherence and uniformity within the analysis, even though occasionally Italian words from the interviews were used in the memos when they were being discussed.

There is no prescribed length or content for memos but, because they are written during the analysis, they tend to be more specific and offer comparatively more answers than questions with the sharpening of the analysis.

Tables 8 and 9 offer examples of memos at different stages.

TABLE 8 - EXAMPLE OF MEMO WRITING – EARLY STAGES

Role of the academic historian in Italy
It has been described as individualistic, elitist, "sacral" meaning that is would be sacrilegious to interfere with it and for the lay people to attempt to be involved. Is this linked to the role of the historian in academia? Is it linked to Croce and the idealist? But then this conflicts with the view, held by Croce, that historians are involved in society and all history is contemporary history. But then again, elitism was created in Italy (Mosca and Pareto). It is important to see whether new generations of historians have a different view. It seems that they do, since they are more engaged in creating online tools that are at everyone's disposal. Is it a generational factor? Is it a political factor or an epistemological one?

TABLE 9 - EXAMPLE OF MEMO WRITING – LATER STAGES

Difference in timings
Even by a rough estimate, there is a difference in the length of the interviews in Italy and the UK. Even though I do not express in any way to the UK interviewees that they interviews are any less important to me than the Italian ones (and they are not) and I do not believe the language itself is a barrier, the interviews with Italian historians last around 40% longer on average. I believe this is due to the surprise of what I doing, which is very new to most of my interviewees, but also and most importantly, to the fact that they want to discuss their work, their choices, their accomplishments because they have a general feeling that these are not recognized and/or discussed enough in the field. Not only non-academic historians, but academics as well! Can this be considered a factor? Is it the indication of a different attitude or just the result of a more comfortable conversation?

Table 10 presents one of the shortest memos written during the research, but one that proved crucial in the analysis. Memos such as this are particularly useful in the research because they support the emergence of theoretical codes, which require reflection and analysis on the connections among substantive codes.

TABLE 10 - MEMO ON "AFFORDANCES"

Affordances
Conole? Affordances for digital history? ICT or e-learning?

Memoing is difficult to report because it works in the background of the data gathering and analysis and emerges more in the results than in the activities themselves. In general terms, 2 to 3 memos were written on each interview immediately after it was conducted, to fix ideas and suggestions "fresh" from the conversation, but memos became much more numerous during the analysis proper.

2.4.3 WRITING UP

The writing up of the theory is the last step. The writing up is supported not only by the coding, but also by the memos, which report the analysis and the considerations of the researcher during the whole process. While writing, the researcher refers back to the data, the analysis and the memos to draw all the elements together in a cohesive structured account.

As highlighted above (2.2) the grounded theory itself can be presented ‘‘either as a well-codified set of propositions or in a running text of theoretical discussion, using conceptual categories and their properties’’ (Glaser and Strauss, 1967, p.31) or as a diagrammatical representation (Glaser, 1978). A grounded theory is “an emerging path” (Glaser, 1998, p.15) and as such it can always be modified by further constant comparison, so it should not be considered a fixed structure even when it is presented as a diagram.

The integration of the generated theory with existing theory in the field of interest brings the process to full circle and shows the contribution of the study to the field (Glaser, 1992, p.32) as a working, if possibly critical, element, rather than a set of theoretical hypotheses “*ab ovo”* (Kelle, 2007, p.197). This is done in the *Discussion, conclusions, implications* chapter (4).

Chapter 2 presented the data collection and analysis process conducted in this study. Chapter 3 moves on to the analysis and findings for this study, starting from the first phase, the open coding, then addressing the emergence of the core category and finally the categories emerged from the selective coding, after the core category had been identified. Furthermore, chapter 3 presents and discusses the complete theory and the comparison with data gathered from interviews in the UK (see above 2.3.3).

3. FINDINGS AND ANALYSIS

This chapter explores this study's findings and is organised in five sections: the first analyses the categories derived from open coding (3.1), the second deals with the identification of the core category (3.2), the third focuses on the categories derived from selective and theoretical coding (3.3), the fourth deals with the formulation of the overall theory (3.4), and the fifth is concerned with the comparative analysis (3.5) of the theory with data gathered in the second part of the main study, i.e. interviewing digital historians in the UK.

The implications of the respondents' opinions, attitudes and experiences will be drawn together in section 4.1.

The categories and their properties and dimensions (where applicable) and their indicators are reported in summary form in each section.

3.1 OPEN CODING CATEGORIES

The objective of open coding, as the first step of the analysis, is to identify a core category (3.2), which forms the "core" of the theory itself and expresses the main concern of the participants. In the process of open coding for this study, three categories emerged, motivation to do digital history, challenges in education and widening participation. The following sections analyse this process in detail.

3.1.1 MOTIVATION TO DO DIGITAL HISTORY

The opening topic of the interviews in the main study (see above 2.3.3 table 4) concerned the respondents' initial involvement with digital history. One category emerged in the open coding on this aspect, i.e. *motivation to do digital history.*

Table 11 below presents the indicators for this category and its properties. The letters in brackets indicate the interview(s) in which the indicators were found.

Data for all categories will be presented in this manner throughout chapter 3.

TABLE 11 - MOTIVATION TO DO DIGITAL HISTORY

Properties	**Being passionate**	**Curiosity**	**Opportunities**
Indicators	Involvement; passion, desire to learn, desire to better oneself (IT-AA); passion (IT-C); passion, being proud (IT-A), passion for ITC (IT-F); valuable effort (IT-BB); passion for history (IT-DD); doing something fun (IT-E), propensity to take risks, "appetite" for creating something new (IT-B), desire to innovate (IT-R).	Indispensable pre-requites is being curious; open to positive surprises (IT-DD); openness to criticism/debate; listening to the audience/readers (IT-CC); experiment, surprise, own initiative (IT-E); curiosity (IT-R, IT-O); interested (IT-N); convinced (IT-P).	Inevitability of change (IT-AA, IT-DD, IT-R, IT-C); changing practices in a changing world; opportunities to do my job at the best; exceptional tools for research (IT-BB); big opportunity, infinite potential (IT-CC); rapid access, rapid work (IT-DD); right thing to do (IT-C); something that did not exist in Italy (IT-A); test the opportunities (IT-M).

Particularly significant is the emphasis the participants give to sentiments and internal motivations that contributed to the scholars' decision to engage with digital history, as reflected by the two properties *being passionate* and *curiosity*.

In the respondents' accounts, the most frequent individual words related to this are "passione", "desiderio", "appetito" (passion, desire, appetite, IT-AA, IT-A, IT-F, IT-DD, IT-B), "curiosità", "essere curiosi" (curiosity, being curious, IT-DD, IT-R, IT-O, IT-E), "interesse" (interest, IT-N, IT-E, IT-C) and "opportunità" (IT-BB, IT-CC, IT-M) offered by "changing practices in a changing world" (IT-BB), a change that is perceived largely as inevitable (IT-AA, IT-DD, IT-R, IT-C).

IT-A provides one of the strongest expressions of the property *being passionate*: "we are very passionate about the internet and the idea of creating, of using the internet and digital content in a completely new manner" and "we are very proud".[4]

IT-C combines a passion for history for an interest in the digital:

> *I have created this thing [*her digital history project*] for my personal interest. I always take a look at digital resources, I have a degree in history and therefore I have always had a passion for history.*[5]

IT-E, who works as a librarian, provides an illuminative statement for the second property, talking about the first digital history project she created, which is a blog/repository of internet resources for history,

> *as a personal initiative, an experiment […], I started in 2007 without any prospects, without even talking about it with my colleagues, as my initiative, because I had fun with it. Every time I would find something interesting, I would put it there.*[6]

Interpreting one of the changes in technology that give these opportunities, IT-E says "in this you see the value of the Internet, because you never know where you are going to end up, but then you find a nice surprise".[7] The third property highlights a motivation that is more linked to the technological environment, i.e. *opportunities*. The terms "opportunity", "change", "potential" also appear in most interviews and represent what the participants see as openings for their projects to start and part of their reason to exist.

---

[4] *"siamo molto appassionati di internet e dell'idea di creare, di usare internet e i contenuti digitali in una maniera completamente differente"; "siamo molto orgogliosi".*

[5] "*ho portato avanti questa cosa [...] perché per mio interesse io guardo sempre un po' le risorse digitali, io sono laureata in storia, quindi mi è rimasta la passione per la storia".*

[6] *"nato per mia iniziativa personale, come esperimento [...] sono partita nel 2007 senza nessuna prospettiva, senza neanche parlarne con le colleghe, come iniziativa mia, mi divertivo, ogni volta che trovavo qualcosa di interessante lo mettevo lì."*

[7] *"in questo si vede il valore di internet, perche' non sai mai dove vai a parare, ma poi ti viene la bella sorpresa".*

3.1.2 CHALLENGES IN EDUCATION

The topic of education in the field of digital history is not often at the forefront of the respondents' accounts, and only IT-P begins a response by recounting experience in creating a training programme. He says,

> *We created this inter-faculty specialist course in history. We created it with Political Science where I have also taught for a time and therefore I had contacts there.*[8]

The use of past tense is not coincidental, since the course was abandoned at a later stage. Not even IT-B, who is a historian of education, addresses this issue in the first instance, but only when asked. His interview begins with his account of the first digital history project he was involved in, a research and not an educational project, and not even funded for the purpose, but through something else:

> *We had put it in place within a Prin [*nationally funded research project*], the only ones where you can get some money, we have spent 5% of the total for this project, the rest of the money went to other things.*[9]

Nonetheless, all respondents show strong opinions when the issue of digital history is posed to them and for this reason the category related to education appeared in the early stage of open coding.

Table 12 (next page) presents the properties and indicators for this category.

[8] *"abbiamo fondato un corso specialistico interfacoltà di storia. Lo fondammo con Scienze Politiche, dove io avevo insegnato quindi avevo dei contatti".*
[9] *"avevamo messo in piedi all'interno di un progetto Prin, gli unici in cui prendi qualche soldino, noi ne abbiamo spesi il cinque per cento, gli altri sono andati in altre cose".*

TABLE 12 - CHALLENGES IN EDUCATION

Properties	Scarcity	Inadequacy
Indicators	Lack of specialist personnel; lack of investment (IT-DD); lack of human resources and skills (IT-B); limited number of experts and specialists (IT-BB); digital history limited to a small number of historians; need for the intermediate professional profiles *figure miste di raccordo* (IT-AA); no training during PhD (IT-A, IT-D).	Generational gap (IT-A, IT-B, IT-N, IT-E, IT-F, IT-C, IT-K); digital natives (IT-R, IT-M); bureaucratic obstacles (IT-CC); delay, slowness of change (IT-DD); difficulty in defining objectives/curriculum (IT-AA, IT-L, IT-O); technological gap; no one to skim through the overabundance of information (IT-CC).

The evaluation the participants give of the situation in Italy related to education is largely negative, with the emerging codes indicating mostly *challenges* and this is the reason why the category related to education contains this term. The data has been categorized into two properties, *scarcity* and *inadequacy*. *Scarcity* emerges from data referring to resources and particularly personnel with appropriate skills, while *inadequacy* refers more to the relationship between the students and teaching staff and their respective skills and needs.

3.1.2A CHALLENGES IN EDUCATION: SCARCITY

This property emerges first of all from references to lack of appropriately trained staff for digital history education, such as "nuove figure professionali" (new professionals, IT-DD), "risorse umane" (human resources, IT-B, IT-CC) and "figure professionali intermedie" (intermediate professional profiles, IT-AA, IT-CC), from the words that indicated scarcity or absence directly and explicitly, such as "gap formativo", "questo non c'è" (formative gap, this does not exist, IT-B), "scarsa disponibilità" (lack of availability, IT-DD), "I see no effort in the official educational programme in this direction" (IT-AA). [10]

[10] *"non vedo alcuno sforzo del percorso formativo ufficiale in questa direzione".*

The combination of these two elements is what produces scarcity within the category challenges in education.

3.1.2B CHALLENGES IN EDUCATION: INADEQUACY

Most interviewees took the view that the generational gap brought about by changes in society also creates issues for the training of the younger generations, because there is simply no one to teach them. There is a lack of skills as well as structures, overall a "lack of digital culture, of a culture of experimentation and innovation", as IT-O interprets it.[11] IT-M illustrates what would be the desirable situation, when he says that it would be important to "make the Web a normal aspect of the teaching process".[12]

Also, digital historians, who are aware of the need for collaboration in the digital field and to combine different skills sets and competencies, highlight the need for "a team of people" (IT-N) to provide training and promote long-lasting legacies of digital projects.[13] IT-DD states that most scholars have not yet understood the need for "a new kind of professional" to support the teaching and learning in the digital sphere and therefore any change will be "very, very slow".[14] IT-L mentions the crucial role played by one of his collaborators as an "intermediary" between himself and the technological world, and states that "the digital sphere allows different competencies to be combined very well".[15]

[11] *"una cultura digitale, una cultura anche della sperimentazione, dell'innovazione che segna il passo".*
[12] *"fare dell'uso del Web una condizione normale della didattica".*
[13] *"ci vuole un'equipe di persone".*
[14] *"nuove figure professionali"; "il cambiamento perciò, per quanto inesorabile, sarà molto, molto lento".*
[15] *"figura intermedia"; "il digitale permette di intrecciare delle competenze diverse molto bene".*

3.1.3 WIDENING PARTICIPATION

This category derives from two sets of indicators, one that refers to increased access to history writing and research, including research and publishing opportunities for non-academic historians and *amateurs* and one that refers to an increase in number and type of audiences for historiography. *Increased access* and *widening audiences* thus become the properties of this category.

TABLE 13 - WIDENING PARTICIPATION

Properties	**Increased access**	**Widening audiences**
Indicators	Contribution of *amateurs* and non-academics (IT-CC, IT-DD, IT-A, IT-K); *appassionati* (IT-A, IT-K); Web publishing as opposed to scholarly publishing (IT-A, IT-CC, IT-DD, IT-N), open access software (IT-A, IT-Q), fewer barriers to publishing (IT-CC, IT-DD, IT-BB); publishing online for specialised texts (IT-N).	Expert dissemination through new tools; sharing of knowledge through innovative tools (IT-AA); contributions of experts, journalists and simple *amateurs;* no need for institutional sponsors; more accessible, journalistic language; dissemination at lower costs (IT-CC); dissemination through social networks; increased cultural role of history and historians (IT-BB); dissemination at lower costs, lower barriers to access to sources and publication (IT-DD); digital historians as open to the general public, attention to media (IT-A, IT-C, IT-O, IT-K); different objectives in communication from most historians (IT-C, IT-CC); doing history for a larger audience (IT-K, IT-O, IT-A); listening to the audience/readers (IT-CC); dissemination through social networks; increased cultural role of history and historians (IT-BB); public history (IT-Q).

3.1.3A WIDENING PARTICIPATION: INCREASED ACCESS

The aspect of digital history linked to increased access to historical research and writing, including publishing, emerges from several indicators in the data.

The attitude towards non-professional historians and *appassionati* (IT-A, IT-K), an Italian word that conveys the concept of "passion" much more precisely than the English *amateurs*, is influenced by the peculiar situation of the digital historians.[16] They perceive themselves, at least in their "digital" activities, as relatively marginal to the mainstream academic life: this is conducive to a willingness to accept and even encourage dialogue with the amateurs who are now able to contact them through their online presence. IT-A is a clear example of this, for both methodological and content issues. Methodologically, IT-A's project has the form of a blog for easy access and immediacy of communication: "we have chosen the blog because from a methodological point of view […] it gave us the possibility to create content in a way more instantaneous".[17] From a content perspective, it is aimed at giving a professional historians' perspective on contemporary historical issues and even current news stories for the general public and the amateurs:

> *we noticed that the debate on contemporary historical issues [in the newspapers] was often addressed by journalists who often would direct the debate towards channels […] that had however no historiographical foundation and very often the debate would end up winding on itself, ignoring a very large part of what are in fact the historiographical studies that can be in some areas very lively but is as a matter of fact invisible because it is restricted to scientific journals, it remains confined to the specialists.*[18]

[16] *"c'è tantissima gente che si appassiona di storia"; "l'appassionato di storia che non è nell'università".*

[17] *"abbiamo pensato alla formula del blog che ci dava anche dal punto di vista metodologico [...] la possibilita' di creare dei contenuti in un certo senso più immediati".*

[18] *"notavamo che il dibattito su tematiche storiografiche contemporanee spesso era affrontato da giornalisti che indirizzavano il dibattito verso dei canali [...] che però non avevano nessun riscontro storiografico e spessissimo il dibattito finiva per avvolgersi su se stesso trascurando tantissima parte di quello che e' invece lo studio storiografico che esiste e che è anche in alcuni settori abbastanza vivace ma che di fatto è invisibile perchè è chiuso nelle riviste scientifiche, rimane material per specialisti"* .

IT-K, being a trained historian as well as a journalist who publishes historical works, is often in touch with members of the public who are interested in history and are engaged in the topics covered by his research. He highlights the same point made by IT-A that often *amateur* historians are more interested in contemporary history because it is

> *closer to us and because there are still witnesses of children of the witnesses alive it has more appeal and also the relationship we can develop with the public and with that group of appassionati can be productive in the sense that it can lead to more results for both parties [the historian and the public]*, which also implies a strong connection with oral history.[19]

IT-P however warns that the contemporary history, especially when associated with oral history, may lead to the confusion between "memory" and "history". This can produce critical effects: "because we all have an experience of memory, we tend to believe that doing history is the same as remembering, reminiscing".[20]

This is the specific topic on which the experience of IT-CC and IT-DD was sought in the pilot study. IT-CC, as the editor of an online history journal not affiliated with academic institutions, sees a "big opportunity for us to draw from the knowledge of scholars, journalists or simple *amateurs* outside the *equilibria* and the mechanisms that regulate the life of a traditional journal", provided that they are given access to the sources and methods used by the scholars to avoid the pitfalls connected to their non-professional status. [21]

---

[19] *"la storia contemporanea essendo più vicina a noi e avendo ancora dei testimoni o dei figli di testimoni ha un appeal maggiore ma è anche il rapporto che si può sviluppare con il pubblico o con quella fascia di appassionati può essere fecondo nel senso che può portare maggiori risultati da una parte e dall'altra".*

[20] *"siccome tutti abbiamo esperienza della memoria, tutti crediamo che fare storia sia come ricordare, rievocare".*

[21] *"una grande opportunità secondo noi, perché consente di attingere alla competenza di studiosi, giornalisti o semplici appassionati al di fuori degli equilibri e dei meccanismi che regolano la vita di una tradizionale rivista".*

Engaging with the cultural sector, with museums, with the community at large is the other face of the same coin. Unfortunately, that same propensity to isolation and individualism that many of the interviewees have mentioned does not help in this field, nor does the fact that historians "tend to, at least in our parts, to consider all other professions in the field of culture as second rate professions".[22]

However, the issue of the difference – or presumed difference – between scholarly publication and dissemination weighs heavily on how historians judge historical publication on the Web, where the "normal" criteria of scientific publication do not apply. It seems that, the easier the technologies are to use, the greater the mistrust they provoke in those already sceptical about their application to historical scholarship. Several interviewees (IT-B, IT-E, IT-L, IT-M) repeat the concern they say they have heard from not so enthusiastic colleagues, who argue that precisely because "anyone" can publish on the Web and "anyone" can access what is being published (even though of course this in itself is a gross approximation of the truth), the requirements of rigorous scholarship cannot reasonably be met within online and digital environments. The Web 2.0 presents a further advantage/challenge in this: given that, as IT-F says, "everyone has the impression that the technology is very easy": Web 2.0 is easy to use but only because it hides "so many layers of software" that most users do not know exactly what is going on and have little control of what the technology really does.[23]

This in turn feeds into the mistrust and lack of communication with non-academic historians, who, on the contrary, have embraced the new technologies, when they have done so, precisely because they allow them to publish, share the output of their work, and communicate with interested audiences. IT-K especially, being a historian and also

[22] *"lo storico tende, almeno alle nostre latitudini, a considerare tutte le altre professioni nell'ambito della cultura come lavori di serie B".*
[23] *"tutti hanno l'impressione che la tecnologia sia molto facile"; "talmente tanti strati di software".*

a journalist, is particularly keen to use the Web, and the social media in particular, to get in touch with his readers and other interested members of the public: through his blog and his Facebook page he has an opportunity to interact directly with them and even to receive historical documents on specific topics that he had not discovered himself.[24]

IT-DD has a similar perspective and stresses the difference digital history makes to his professional opportunities in history: "without the computer and the Internet my work would be much slower and more difficult", referring to both the access to historical sources and the access to publication of the research findings. [25]

This also has a direct and positive effect on history writing for non-academic historians. New online historical journals have made publishing possible at lower costs, as both IT-CC and IT-DD mention. IT-CC also cites the main aim of the journal he directs, which is that of "popularization", aided by the free availability of all journal contents.[26] He recognises that the risks attached to this approach in terms of quality of the product are not negligible. He says, however, that the trustworthiness of the content that is being published is checked nonetheless, even though not through the channels of publishing houses and academia.

Digital historians seem more open to using their increased opportunities to write for an "audience larger than just the insiders", as IT-K says, and to connect with those *appassionati*. [27] This would be possible with traditional publications and face to face

[24] *"ho l'occasione di creare interazione coi lettori in relazione a quello che loro vedono nel blog. [...] Mi hanno portato dei volumi a diffusione locale o addirittura fuori commercio o documenti; ho ricevuto da molti di loro documenti originali che poi mi sono stati utili e mi saranno utili nelle ricerche che ho fatto e nelle ricerche che sto facendo".*
[25] *"senza computer e senza internet il mio lavoro sarebbe più lento e più faticoso".*
[26] *"divulgazione".*
[27] *"un pubblico più vasto di quello degli addetti ai lavori".*

presentations, but the digital tools, including social media, as mentioned by IT-K, have opened up more opportunities for both groups.

Academic historian IT-N suggests also, in a sort of reversed reasoning, that the lower costs of online publishing could greatly advantage specialised publications that would not sell very well and therefore the "digital tools could be the opportunity to let this learned, specialist publications survive without having to face costs that are too high or prohibitive".[28]

3.1.3B WIDENING PARTICIPATION: WIDENING AUDIENCES

Widening participation also refers to data that represent communication and dissemination of history to audiences outside academia. The data show that the interviewees are largely positive in this respect, but with some variation.

Interviewee IT-K is of the view that most historians until recently were not very sensitive to dissemination and considered themselves as "standing on a pedestal".[29] However, he is optimistic about the new generations, who, he says, "have a different role" and "become an active participant in society in the world of culture and communication".[30] IT-M also has an optimistic view, saying that the strongest reservations concerning opening up historiography to a larger public have been overcome, even though it is still not clear how historians should proceed in that direction.

Still, most interviewees do not have a particularly positive view of how historians in general communicate. According to IT-C, the situation regarding communicating with

[28] *"lo strumento digitale potrebbe essere invece l'occasione per continuare a far sopravvivere questa publicazione erudita più specialistica senza affrontare dei costi eccessivi o impossibili".*
[29] *"prima lo storico spesso stava più su un piedistallo"*
[30] *"una nuova generazione di storici [...] hanno un ruolo diverso rispetto al passato [...] perche' prima lo storico stava più su un piedistallo, mentre lo storico diventa parte attiva della società nel mondo culturale, nel mondo della comunicazione".*

the general public is different in the UK, where the use of the media by historians has played quite an important part in bringing history to the public.

Of all the interviewees, IT-A and IT-K discuss this issue at most length and they both highlight the fact that communication through the digital media is significantly faster ("instantaneous" in IT-A's words) than through other media and certainly than through peer reviewed scientific publication. This has very specific consequences for the quality of the communication: first of all, fast communication through the digital media is not mediated and certainly not peer-reviewed; this can be seen as a serious fault by most scholars. IT-K himself warns that "there is a danger because speed does not always go together with efficiency and quality of communication".[31]

On the other hand, instantaneous communication, especially through the Web, elicits and permits more open debates and interactions with the readers, which is in turn one of the reasons why IT-A and IT-K have chosen to write on the Web in the first place. IT-K is also very involved in this, due to the fact that his communication and his writing on the Web are strictly linked with his "traditionally" published works. It is clear from his reflections, though, that his purpose is not purely promotional: he believes the historian must play "an active role in society, in the cultural world and in the world of communication" and get actively involved with those individuals and groups who "have a profound passion for history and cultivate it not only by reading by also by conducting their own research".[32] This is not only useful for these *amateurs* but for the historian as well, not only to occasionally discover sources and documents that

[31] *"è un pericolo perchè la velocità non sempre si coniuga con l'efficienza e la qualità della comunicazione".*

[32] *"un ruolo attivo nella società, nel mondo culturale e nel mondo della comunicazione"; "hanno una passione profonda per la storia e la coltivano non solo leggendo ma anche conducendo le loro proprie ricerche".*

she/he would not have otherwise easily found, but especially because "it is a useful, cultural, human exchange".[33]

One very specific topic in the context of *widening participation* where both sides, access and audience, converge is public history. This term is directly mentioned only by IT-Q and he refers initially to public history as "discourse of history outside academia"; public history does not need to be digital, but, with what IT-Q calls "the digital turn" in the mid-1990s, and even more with the participatory affordances of the Web 2.0, public history has partially become digital as well.[34]

3.2 IDENTIFYING THE CORE CATEGORY: FROM PIONEERING TO DEVELOPING DIGITAL HISTORY

The core category represents the concern of the participants and how they attempt to solve it (see above Table 1 point 2). Identifying the core category is an analytical process, always based on constant comparison, and it is supported by memoing (2.4.2), insomuch as memoing helps the analyst sort and organise the categories emerging from the data and their relationship to one another.

The categories identified in the open coding process, *motivation to do digital history* (3.1.1), *challenges in education* (3.1.2) and *widening participation* (3.1.3) constitute the first steps towards shaping a core category for this study.

The first association made among these categories emerged from a word that was found *in vivo* in two interviews (IT-M and IT-P), i.e. *pioneering*. IT-M describes the group of colleagues he is writing a book on digital history with as the "pioneers", who have shared with him the experience of digital history in Italy from the late 1990s up to the

[33] *"lo storico diventa una parte attiva nella società, nel mondo culturale, nel mondo della comunicazione"; "ci sono tanti italiani e tante italiane che hanno una passione profonda per la storia e che la coltivano dal punto di vista individuale con le letture e non solo ma anche con ricerche personali"; "è uno scambio utile, culturale, umano".*
[34] *"discorsi di storia fuori dall'accademia".*

present. IT-P uses the word "pioneer" to distinguish "those who have been and still are advocates of an in-depth use of digital tools" from those who do not. [35]

As the core category of the emerging theory, *pioneering* was able to connect the individual initiative of the digital historians, expressed in the personal and emotional *motivation to do digital history*, represented by *being passionate* and *curiosity*, with their relative isolation within the discipline, exemplified by their misgivings about applying digital history to education and also represented the idea digital historians in Italy perceive themselves as different from other historians, for instance reporting that they are better disposed towards *widening participation* to historiography.

However, the manner in which *pioneering* connected the identified categories was heavily reliant on identity/affective issues of the scholars and set aside their operational, purposeful concerns as promoters and developers of the digital within historiography.

The first warning was in the words of one of the two participants who used the term *pioneers*, IT-P, who cautioned against putting too much emphasis on terms such as enthusiasm, because "enthusiasm is a personal trait".[36] Actually, the data does not show pre-eminently concerns over personal issues, but interest and concern about the topic of digital history from a professional perspective.

Therefore, a different core category was identified that addressed these concerns, i.e. *developing digital history*. Formulated in this way, the core category represents better the main concern of the participants, because is more outward facing. What they say is not introspective, but points to active professional engagement. The clearest representation of this shift is given by IT-O, who describes the first significant digital

[35] *"chi era un propugnatore e chi lo è stato e chi lo è ancora dell'uso profondo degli strumenti digitali".*
[36] *"non dico entusiasta, perchè l'entusiamo è un fatto personale".*

history project he initiated as an attempt to create something that was going to be "innovative and that would explore the possibilities of informatics to facilitate, improve, expand, in one word explore the potential there is in these technologies".[37] Similarly, other elements, such as the category *widening participation*, point towards a change that is pursued voluntarily and professionally, even if it does not strictly correspond to professional requirements.

For these reasons, selective and theoretical coding, presented in the section 3.3, proceed on the basis of this core category.

3.3 SELECTIVE AND THEORETICAL CODING CATEGORIES

After the core category is identified, the selective coding process can begin. In this case, nine substantive categories have emerged from the analysis, some new, some modified from the three categories emerged in the open coding and discussed previously in 3.1.

This chapter discusses categories that emerged from selective and theoretical coding. Each section deals with the substantive categories preceded by the theoretical code that explains their connections and interactions. Three theoretical codes are presented: affordances, challenges and disciplinary context. They refer to what digital historians see as offerings of digital history for their work, the challenges they perceive and the wider context of the discipline of histori(ography).

3.3.1 AFFORDANCES

Affordances are what the environment offers, for good and bad the digital historians who see as largely positive aspects of doing digital history; they work as personal

[37] *"che fosse innovativo e che esplorasse le possibilità della telematica per facilitare, migliorare, ampliare, insomma esplorare le potenzialità che c'erano in questa tecnologia".*

motivation but also as professional outlooks on opportunities for historians in the digital world.

The theoretical code *affordances* emerges mainly from the need to link together the various aspects that create the situation, the interest and the personal rewards for some Italian historians to undertake work in digital history. In terms of digital tools for history, the concept of affordances (Conole and Dyke, 2004a,b, see above 1.1.2) has been employed as a theoretical code to bring together and connect the positive aspects in the participants' view of digital history. There is no term in Italian to appropriately translate "affordance" (Wikipedia, 2014b) and it is therefore clear that it cannot be an *in vivo* code. Still, within the data, terms such as "opportunities" (IT-M, IT-CC, IT-DD, IT-K, IT-BB) indicate that digital historians see in the digital world elements that must be explored, at least to investigate the possible benefits. This code fits within the "interactive" coding family (Glaser, 1978), because it represents well the relationship between the historians who experiment in the field of digital history because they see opportunities and also the opportunities – affordances – that they produce through their experimentation.

3.3.1A AFFORDANCES: AFFECTIVE BENEFITS

Affective benefits are the first element that emerges in the data with reference to the reason or *motivation* for digital historians *to do digital history* (3.1.1) in the first place and in fact it corresponds to the first two properties of that category, which emerged from the open coding, *being passionate* and *curiosity*. Table 14 below represents the indicators for this category.

TABLE 14 - AFFECTIVE BENEFITS

Indicators	Involvement; passion, desire to learn (IT-AA); passion (IT-A; IT-C), pride (IT-A); passion for ICTs, extremely interesting and absolutely innovative (IT-F); valuable effort; do my job at the best (IT-BB); passion for history; Indispensable pre-requites is being curious; open to positive surprises (IT-DD); curiosity (IT-R, IT-O), doing something fun, "something that makes my work more interesting"[1], see what happens (IT-E); propensity to take risks, appetite for creating something new (IT-B); passionate user (IT-L); openness to debate (IT-CC); involvement, adventure (IT-P); desire to innovate (IT-R); a more ambitious idea (IT-P); hobby (IT-C, IT-F), accidental (IT-B), auxiliary activity (IT-F, IT-R); desire to innovate (IT-R); appetite for creating something new (IT-B); big opportunity, infinite potential; independence (IT-CC).

Affective benefits differs from the category *motivation to do digital history* identified in the open coding (3.1.1) because it brings more effectively together the personal nature of these motivations, in contrast with considerations related to professional benefits. In fact, the property "opportunities", identified in the open coding within the category "motivation to do digital history" (3.1.1), contained indicators that were better interpreted by the category *responding to change in society* (see below in this section).

Affective benefits are a key element of the doing digital history for digital historians in Italy, and this is confirmed from the combination of the properties "being passionate" and "curiosity": all the indicators for this category are of a deeply personal nature and at the same time they have a connection to fulfilling aspirations and interests that are linked to being a historian.

3.3.1B AFFORDANCES: AVAILABILITY OF SOURCES

This category is a simple one, because the data show considerable uniformity. Table 15 (next page) shows the indicators for this category.

TABLE 15 - AVAILABILITY OF SOURCES

Indicators	Availability of online primary and secondary sources (IT-Q, IT-B, IT-C, IT-E, IT-N, IT-AA, IT-CC, IT-DD, IT-BB, IT-F, IT-K); original texts and argumentative tests available online (IT-F); elasticity in communication and research (IT-P); rapid access, rapid work (IT-DD); convenience in information retrieval (IT-AA).

Eleven interviewees mention explicitly that the main affordance of the digital for historiography is the availability of online primary and secondary sources. According to IT-Q, this amounts to a true "revolution in the profession", because a revolution in the sources – how they are accessed and where – amounts to a revolution in the profession overall.[38]

However, IT-N considers that the availability of sources is seen by most historians mainly as a practical innovation, related to "convenience", to something that is "convenient" and "very useful" to use but that does not appear to "be able to modify the traditional paradigm, the working methods". [39] IT-AA also highlights the "convenience in information retrieval, rapidity of communication, lower costs".[40]

As IT-B states,

> *even the most individualistic among our colleagues are very interested in the fact that they can find documents online that they would otherwise have had to look for in faraway, inconvenient archives. And therefore you hear that they are really excited and praise even the least appealing of Websites, if it provides them with a year of a journal they could not find in their university. Let's say, then 90% of these lone*

[38] *"se uno storico parla di rivoluzione nel campo delle fonti parla di rivoluzione nel suo mestiere".*
[39] *"comodità", "comodo", "utilissimi"; "non vedo come questa cosa possa modificare il paradigma tradizionale".*
[40] *"comodità di recupero delle informationi, la velocita' della comunicazione, i costi minori".*

wolves remains resoundingly selfish, so they thank their good fortune and their lucky star that they have found the document and that is it.[41]

The increased access to primary and secondary sources also works for non-academic historians for practical reason. IT-DD explains "without my computer and the Internet my work would be slower and more difficult".[42] For non-academic historians the lower barriers to access for primary and secondary sources have afforded opportunities that were out of their reach before, allowing them to do research in a way that "only ten years ago would have inconceivable" (IT-DD).[43] As IT-CC points out, "the direct link [to publication] with academia or institutions has become weaker" and if on the one hand these entities were able to guarantee a certain quality, on the other hand they were maintaining high barriers to access as well.[44] IT-CC stigmatizes the old-fashioned mentality according to which "historical archives are the exclusive domain of specialists and insiders, an 'esoteric' approach to history that the arrival of the Internet has partially debunked".[45]

3.3.1C AFFORDANCES: WIDENING PARTICIPATION

This category was identified and analysed in the open coding (section 3.1.3), where it played a key role in supporting the shift from the tentative core category *pioneering* to the definitive *developing digital history* (section 3.2). *Widening participation* to both digital history and historiography in general is seen as an affordance of doing digital history and the participants demonstrate openness and an active engagement in

[41] *"quindi li senti davvero esaltati, tessere le lodi anche del più sfigato dei siti che però gli mette a disposizione un'annata di una rivista introvabile nella loro sede. Diciamo che il 90% di questi lupi solitari però resta un clamoroso egoista, per cui ringrazia la buona sorte e la buona stella per aver trovato il documento o i documenti e ciao. Finisce lì."*
[42] *"senza computer e senza Internet il mio lavoro sarebbe più lento e più faticoso".*
[43] *"solo dieci anni fa sarebbe stato impensabile".*
[44] *"venire meno di un rapporto diretto con enti accademici o istituzioni".*
[45] *"il retaggio di un'antica mentalità, che vuole gli archive come patrimonio esclusivo di specialist e addetti ai lavori. Un approccio 'sacrale' alla storia che l'avvento di Internet ha permesso, in parte, di ridimensionare".*

pursuing this widening of participation. Hereafter the table containing the category's properties and indicators is reproduced, for reference purposes.

TABLE 16 - WIDENING PARTICIPATION

Category	**Widening participation**	
Properties	**Increased access**	**Widening audiences**
Indicators	Contribution of *amateurs* and non-academics; no need for institutional sponsors (IT-CC, IT-DD); Web publishing as opposed to scholarly publishing (IT-A, IT-CC, IT-DD, IT-N), open access software (IT-A, IT-Q), fewer barriers to publishing (IT-CC, IT-DD, IT-BB); publishing online for specialised texts (IT-N).	Expert dissemination & sharing of knowledge through innovative tools (IT-AA); more accessible, journalistic language; dissemination at lower costs (IT-CC); dissemination through social networks; increased cultural role of history and historians (IT-BB); dissemination at lower costs, lower barriers to access to sources and publication (IT-DD); different objectives in communication from most historians (IT-C, IT-CC); digital historians as open to the general public, attention to media (IT-C, IT-O, IT-K); doing history for a larger audience (IT-K, IT-O, IT-A); listening to the audience/readers (IT-CC); public history (IT-Q).

The new element for this category in the selective coding is the placement of this category with respect to *developing digital history*. The category *widening participation* to historiographical work, which had emerged strongly already in the open coding, is firmly located within the *affordances* of digital history. Despite some concerns expressed by the interviewees, (3.1.3), overall this category reinforces the view emerging from the data that digital history is a means to a positive end, i.e. to offer more and better opportunities for a shared construction and sharing of knowledge on history in society.

3.3.1D AFFORDANCES: RESPONDING TO CHANGE IN SOCIETY

This category represents part of the data that was previously, in the open coding, considered as a property, *opportunities*, of the category *motivation to do digital history* (3.1.1) as well as data from the category *challenges in education.*

Table 17 below shows the indicators for this category, which coincide with the indicators for the property mentioned above.

TABLE 17 - RESPONDING TO CHANGE IN SOCIETY

Indicators	Inevitability of change (IT-AA, IT-DD, IT-R, IT-C); inexorable (IT-DD); right thing to do, no excuse (IT-C); impossible not to do (IT-AA); something that did not exist in Italy (IT-A); big opportunity, infinite potential; independence (IT-CC); rapid access, rapid work (IT-DD); changing practices in a changing world; opportunities to do my job at the best; exceptional tools for research (IT-BB); something that did not exist in Italy (IT-A); test the opportunities (IT-M); generational gap (IT-A, IT-B, IT-N, IT-E, IT-F, IT-C, IT-K); digital natives (IT-R, IT-M).

The reason for this change is based on the consideration that these data, seen as *affordances* of *developing digital history*, have an element in common, that they originate not in the field of history itself, but in society, where the changes in technology, and in its pervasive influence on society and especially on the new generations, are perceived by the interviewees as a call for professional action on their part.

A view that is frequently expressed in the data is that change in technology in the outside world is continuously occurring and inevitable. The perceived unavoidability of change (IT-C, IT-R, IT-DD, IT-AA), in particular IT-AA asserts that digital history "will become the normal way to do history and it will do that despite the resistance

from academia and publishing houses",[46] is accompanied by the belief that learning more about this change, brought about by the digital world, was "the right thing to do".[47] The professional/epistemological necessity for historians, especially the new generations, to confront the issue is remarked,

> *the new [generations], PhD students, researchers who are younger than their lecturers, I believe they have no excuse not to be informed, not to practice a bit; even in the things that are not taught from above, but are taught in other countries, everyone can gain information, understand a bit how it works* (IT-C).[48]

IT-AA is even more adamant on the point: "it is not possible to teach history without in some way teaching also the methodological issues and the problems brought about by innovation" (IT-AA).[49] IT-C stresses both personal aspirations but also a sort of moral "imperative" to move forward: "Always for the desire to learn and the conviction that it is the right thing to do".[50] While IT-R is of the view that "we cannot exempt ourselves because this is the direction the world is taking".[51] IT-M does not hesitate to define as "absurd and somewhat pathetic" all attempts to deny or halt the changes brought about by technology in historical scholarship.[52] IT-BB expressed this very clearly by saying the changes occurring in the scholarly world provide opportunities for improvement in the quality of the work as well as increased availability of tools for research.

---

[46] *"Penso che diventerà il modo tradizionale di fare storia e lo farà a dispetto delle resistenze dell'accademia e delle case editrici".*
[47] *"convinzione che fosse giusto".*
[48] *" i nuovi, i dottorandi, i ricercatori che oggi sono più giovani dei docenti, credo che non abbiano scuse per non informarsi per praticare un pò; anche delle cose che non vengono insegnate dall'alto ma vengono insegnate in altri paesi, ognuno si può informare, può un pò capire come funziona".*
[49] *"non si può più a mio parere insegnare storia senza in qualche modo insegnare anche le questioni metodologiche e le problematiche portate dall'innovazione stessa".*
[50] *"sempre per voglia di imparare e per convinzione che fosse giusto".*
[51] *"non ci si può esimere perchè il mondo va in quella direzione".*
[52] *Arroccarsi sulla difesa della vecchia università che non c'è più diventa assurdo e anche un pò patetico".*

The other important element of change coming from society is what most interviewees identify as a generational gap between scholars, administrators and students. One interviewee (IT-B) describes the feeling of disquiet and even fear to some extent that one senior scholar experienced when faced, year after year, with students belonging to no less than the third generation after him. Reinforcing this sense of distance is, of course, the use of technology in everyday life; IT-F says that "99% of those who are not involved in digital scholarship were raised [and trained] in a completely different environment".[53] Of course, there is widespread acknowledgement that the students today belong to a generation used to living with the digital world, even though not all interviewees use the controversial term "digital natives" (IT-R, IT-M use it the English term directly; IT-N, IT-E, IT-F, IT-C, IT-K refer to the technical skills of the younger generations but do not use the term). They simply discuss the fact that most students never knew a world without the "digital". In IT-M's words, "the students are born digital natives".[54] It is clear, nevertheless, that in most cases the students "know far more about IT than the staff that are teaching them" (IT-B).

However, IT-F points out that, even if these young students are indeed technology savvy, they do not necessarily show "sensitivity" to the issues related to online content.[55] They also do not show a strong set of critical thinking skills and certainly do not receive a specific training on how to use Internet and Web technologies in a scientifically sound manner. IT-K confirms exactly the same view, by saying that, while the new generations "were born with the Internet", so they are technically savvy but risk being hostages of the technology itself for lack of methodological knowledge

[53] *"99% di persone che non sono impegnate nel digitale sono cresciute in un ambiente diverso".*
[54] *"gli studenti nascono digitali nativi".*
[55] *"sensibilità verso gli oggetti che sono presenti in rete non mi sembra che sia molto presente".*

on how to use it.[56] IT-M is even blunter, saying that the way they use the internet is "barbaric" and they have no idea how to use it to reach their educational goals.[57] IT-L uses a kinder word but with the same effect: "truly they [are] naïve, a naivety that one would not expect from them".[58]

Both IT-R and IT-K make the point specifically that being born in the non-digital age is actually an advantage ("I am not a digital native, thank goodness", IT-R) because it allowed them – and all historians in their generation – to face the parameter changing technology on the basis of the traditional preparation of a conventional historian.[59] As seen above, from the point of view of the digital historians, today's students do not seem to enjoy this opportunity.

3.3.2 CHALLENGES

Challenges represents a theoretical code that mirrors the previous one, i.e. *affordances*. *Challenges* brings together three categories that have a distinctive, but not exclusively, negative aspect: *marginalisation*, *impermanence* and *transferring digital history to education.*

In the literature, affordances are paired with risk (Conole and Dyke, 2004a), but the participants do not generally use the word risk except on a generally positive note (IT-B). They do mention difficulties of various kinds that can be described as challenges but have not prevented them from continuing their digital history experiences.

[56] *"le nuove generazioni sono nate con internet"*
[57] *"sono digitali nativi ma abituati ad un uso della rete assolutamente barbarico [...] non hanno nessuna idea di che cosa si possa trovare in rete in relazione agli interessi di studio".*
[58] *"veramente erano ingenui, una ingenuità che uno non si aspetta da loro".*
[59] *"io non sono un nativo digitale, grazie a dio".*

3.3.2A CHALLENGES: MARGINALISATION

The category *marginalisation* interprets the situation of digital historians within their professional context: it results from the combination of three elements (the properties of this category): *identification, lack of critical mass* and *low persuasive power.*

TABLE 18 - MARGINALISATION

Properties	**Identification**	**Lack of critical mass**	**Low persuasive power**
Dimensions	**Partial/accessory; Complete**		
Indicators	**Partial/accessory** Passionate user (IT-L); hobby (IT-C, IT-F), accidental (IT-B), auxiliary activity (IT-F, IT-R), not enough technical skills (IT-BB, IT-L), not a defined professional group/job – individual mavericks (IT-A); a group that is not a group (IT-R); Too ambitious/overstated (IT-N); not an expert (IT-BB); not an expert, not yet a digital historian but would like to become one (IT-L); **Complete** I have had the adventure of being one (IT-P); IT-O is a digital historian (IT-R); IT-R is the most influential member of the group of digital historians in Italy (IT-O); I am a digital historian now (IT-Q).	Lack of critical mass; Limited numbers (IT-AA); individualism (IT-B, IT-C, IT-DD and IT-F); unconventional and very marginal niche (IT-A), an ancient mentality (IT-CC); vanity and opportunism instead of genuine interest on the part of most historians; fruitless criticism (IT-AA); lack of funding (IT-B, IT-F, IT-O); lack of organisational resources (IT-B, IT-N);	Unconvincing experiences; inability to convince; scepticism (IT-B, IT-P); difficulties but less diffidence (IT-R, IT-M); cultural delay (IT-F, IT-O); less willingness to experiment, less willingness to debate (IT-P); elite; restricted group; negative evaluation of non-academics (IT-B, IT-E, IT-L, IT-M), esoteric/secretive approach (IT-CC); conservative country (IT-BB); traditional forms of publication still prevailing; resistance from academia; little interest for methodological issues; opportunism (IT-AA); different objectives in communication from most historians (IT-C).

Identification

Identification is the property that evaluates what the interviewees think of the use of the term of "digital historian" to describe them. It plays a role in their reflections on their own work but also on their professional environments.

The interviewees' *identification* with the label of digital historian has two dimensions: *partial* and *complete*. These are placed as responses on a gradient, through some degree of ambivalence.

Only three interviewees (IT-BB, IT-L and IT-N) explicitly question the idea of being defined as "digital historians". IT-N says that the overall definition of digital historian "is a little too ambitious as a definition for Italy" and also, from an individual perspective "in my case, digital historian is somewhat overstated", but does not reject it altogether.[60] IT-BB states clearly that "it is still a matter of limited experts and specialist. I am not among those" but also says he is "not a big expert".[61]

IT-O and IT-R, who have a mentor/pupil relationship in this field, represent a case of reciprocal attribution of the term: on the one hand, IT-O, while he does not refute the definition for himself, maintains that IT-R is, in his view, "a true digital historian", because he has created specific digital tools for historical research. On the other hand, IT-R makes it clear that, while they both – and others – belong to a "group that is not a group", of whom IT-O is certainly "the most influential member".[62]

IT-P accepts the definition, with some restraint: "I have to say that I feel deeply involved, because I have had the adventure of being one of them [digital historians]".[63]

---

[60] *"una definizione un po` troppo ambiziosa per l'Italia";"nel mio caso, storico digitale è un po' esagerato".*
[61] *"non sono un grande esperto".*
[62] *"un vero storico digitale"; "un gruppo che non è un gruppo"; "il rappresentante più influente".*
[63] *"devo dire che mi sento molto coinvolto perchè ho avuto l'avventura di essere uno di questi".*

IT-L accepts the label and its methodological implications but considers himself still unworthy of it, despite his participation in several projects and publications:

> *I am not yet a digital historian but I would like to become one […] I am a passionate user […] so there is on my part the deepest acceptance of the possibility of integrating digital resources into the process of research and even more of the process of teaching.*[64]

IT-Q, an academic historian and also a librarian, accepts the label *in toto*, making it clear that he has abandoned his studies in contemporary history to dedicate himself completely to digital (public) history:

> *they still ask me to speak on my old research topics […] and every time I politely decline, I say no, because […] I devoted put all my energies in other areas, which I consider more important and more interesting and I do not do things that are only directed to an academic audience anymore.*[65]

No other interviewee is able to adopt a purely "digital" job title, because the activities related to digital history do not constitute their main professional activity. IT-F and IT-R, in particular, say that this exclusion applies to all academic historians in Italy; two interviewees (IT-C and IT-F) use the word "hobby" to describe what they do in the field of digital history, but while IT-C is a librarian and not a professional historian, IT-F is a senior scholar in academia. He says:

> *We do these things 'a latere' […] we carve out room [within other projects] for something we believe is very important and absolutely innovative and that puts into question also epistemological issues, on research methodology, so this is certainly a*

[64] *"non sono ancora uno storico digitale ma vorrei diventarlo [...] sono un appassionato utente [...] c'è da parte mia un'adesione massima alla possibilità di integrare le risorse digitali dentro i procedimenti della ricerca o soprattutto dentro i procedimenti dell'insegnamento".*

[65] *"mi chiedono ancora di intervenire sui miei vecchi temi di ricerca [...] e io ogni volta gentilmente declino [...] ho messo tutte le mie energie in altri ambiti che trovo più importanti e interessanti e non faccio più cose che si indirizzano soltanto a un pubblico accademico".*

> *very interesting territory and at the same time we do it a little as a hobby, as amateurs more than specialists because I cannot afford to dedicate all my time to this topic.*[66]

Moreover, despite the existence of "pioneers" ("pionieri", IT-M, IT-P) in digital history, they at best constitute "a group that is not a group" (IT-R) and therefore do not share a professional definition.[67] According to IT-A, they cannot identify with an institution or a structure, but they represent "individual biographies of mavericks" with very feeble ties with others.[68]

A sense of humility towards the technical aspects and skills involved in digital projects and a perception that one has to master all aspects of those in order to be called a digital historian (IT-BB and IT-L) adds to this reluctance to accept the professional title of digital historian, even though they do not explain which skills would be necessary or sufficient to deserve it.

Despite these identification issues, the interviewees demonstrate willingness as well as the competence to comment on digital history from an insider perspective and years of direct experience and are able to elaborate on it and problematise the description in various areas.

Lack of critical mass and low persuasive power

Lack of critical mass as a property of *marginalisation* captures the issue of numbers of digital historians *vis à vis* historians in general, and combined with the issue of their *low persuasive power* illustrates the limited capacity of digital historians and digital

[66] *"facciamo queste cose a latere [...] all'interno [di altri progetti] ci ricaviamo degli spazi su una cosa che crediamo molto importante e assolutamente innovativa e che mette in discussione anche questioni di carattere epistemologico, di metodologia della ricerca, quindi sicuramente è un territorio estremamente interessante e nello stesso tempo lo facciamo un pò per hobby come appassionati più che come specialisti veri e propri perchè io non mi posso permettere di dedicarmi a pieno a questo argomento".*
[67] *"un gruppo che non è un gruppo".*
[68] *"biografie individuali di cani sciolti".*

projects in Italy to significantly influence others to adopt or engage with digital technologies.

In general, the interviewees give a rather negative judgement of the attitudes of historians, indicating that in Italy they tend to consider themselves as an élite.

IT-C describes the situation as

> *here it is more elitist. [The historian] is a solitary thinker who meets with other solitary thinkers and together they discuss their thoughts closed in a small niche, this is not history for everyone* [69]

and also

> *they do not feel the need to make themselves understood; it is a restricted group, an elite, therefore also for this reason they do not have a significant interest in having anything published on the Web.* [70]

As detailed above, most interviewees describe their projects as originating from individual initiative and interests, as opposed to systematic planning on the part of their institution or a general project involving multiple actors and activities.

Therefore, digital historians in Italy feel marginalised with respect to the majority of historians in the country, when they engage in digital history projects.

However, four interviewees, IT-B, IT-C, IT-DD and IT-F highlight the fact that historians in general tend to work alone. IT-B uses several strong expressions, such as "lone hunter", "lone wolf", "resoundingly selfish", while IT-C calls the typical Italian historian "a solitary thinker" who is closed in a "small niche".[71] IT-DD uses the word

[69] *"da noi è più elitario. È un pensatore solitario che si trova con altri pensatori solitari e tutti insieme discutono dei loro pensieri; è chiuso nella sua piccola nicchia. Non è storia per tutti".*
[70] *"non sentono il dovere di farsi capire; è una cerchia ristretta, un'elite, quindi anche per questo non hanno questo grande interesse ad avere pubblicazioni sul Web".*
[71] *"cacciatore solitario", "lupo solitario", "clamoroso egoista"; "è un pensatore solitario", "chiuso nella sua piccola nicchia".*

"individualist", IT-F expresses a similar view that "[history] scholars are individuals, not teams" and also that, in Italy, edited works – collaborative by definition – are not taken into account in academic evaluation for history.[72] In this respect, then, digital historians should not perceive a difficulty *per se* in working individually. However, since "online you cannot think of working alone. It is unimaginable" (IT-B), they face the challenge of needing collaboration in a field that is resistant to it.[73]

Therefore, the specific *marginalisation* digital historians perceive is not only due to the "normal" attitude of the profession, but it is strictly related to the general hesitation or scepticism (IT-B) that most historians in Italy show towards colleagues, or even more non-academic historians, who engage with the digital.

On this issue, however, the interviewees show a certain variety of views. There are several pessimistic views on the interest and willingness of non-digital historians to engage or even discover more about the topic. IT-C says, for instance,

> *I would not want to seem too defeatist, but my impression is that they do not have a lot of familiarity or interest for digital tools. This is, I believe, particularly an Italian issue.*[74]

Overall IT-R, IT-O and IT-M are fairly optimistic about the amount of change that has already occurred among Italian historians. IT-M, while highlighting the difficulties still present, says that "the phase of diffidence has now passed" and "historians are open to

[72] *"gli storici, compreso chi scrive, sono spesso degli individualisti";"chi studia e' un singolo, non un team di persone";"se io faccio un lavoro a cura non viene considerato un lavoro scientificamente valido".*
[73] *"online non puoi lavorare da solo, inimmaginabile".*
[74] *"io non vorrei sembrare eccessivamente disfattista ma mi sembra di notare che non abbiano una grandissima familiarità nè un grande interesse per quanto riguarda gli strumenti digitali; questo credo che sia un pò una cosa molto italiana".*

this issue".[75] The majority of the interviewees express views compatible with what IT-F calls a "cultural delay in addressing digital issues".[76]

Some interviewees point to an evolution in the general attitude that has led to less opposition and more cautious interest: IT-O exemplifies this by saying that, while "we are still very much behind", it is also "clear that that kind of suspicion, snigger, smugness or even refusal that was present 15 years ago" is no longer there. [77] IT-R also confirms that he does "not have such a negative impression" on the attitude of non-digital historians to the digital. [78]

This evolution is attributed, beside the simple passage of time and the ubiquity of digital tools in everyday life, as highlighted by the *affordances*, with particular reference to the *availability of* (online primary and secondary) *sources* (3.3.1b).

However, IT-Q warns against giving this fact for granted, because these sources are often – but not always – deprived of the epistemological context that is provided by the structure of the physical archive, but it is much more difficult in an online, highly volatile environment. This creates a degree of uncertainty that can disrupt the essential philological procedures the historian is used to. The context must be reconstructed and the coordinates repositioned.[79]

Moreover, the widespread use of everyday electronic tools by all historians, such as document writing and email, does not in itself support the development of digital history. IT-AA foresees that

[75] *"mi sembra che la fase della diffidenza sia passata"; "la disponibilità esiste da parte degli storici".*
[76] *"un ritardo culturale sull'affrontare il digitale".*
[77] *"siamo molto indietro", "è chiaro che quel tipo di sospetto, di risolini, di sufficienza o addirittura di chiusura che c'erano 15 anni fa [...] questo oggi non c'è più".*
[78] *"non ho un'impressione così negativa".*
[79] *"questo è il problema che pone il nuovo media agli storici, cioè ritrovare delle coordinate critiche e contestuali con la volatilità sul digitale".*

> *in a few decades everyone will be a digital historian because our work will only be possible by commanding the tools and the issues of the digital world.*[80]

However, the road there is still largely undetermined.

The next question then is whose responsibility is it to create the conditions for digital history to develop? IT-R expects digital historians themselves to produce the necessary depth in the "evolution in the landscape of tools, resources, opportunities offered by the digital revolution": if digital historians had been able to produce "truly ground-breaking innovation", the situation might have been different at this stage. [81]

This, according to the participants, has happened in the US: IT-O, IT-P and IT-Q mention the project *The Valley of the Shadow* as a stimulus for more experimentation. In Italy good, innovative projects have not produced many imitators or inspirations.

IT-P considers that we are in a phase where the desire, willingness and ability to experiment seem to have slowed considerably, if not stopped altogether:

> *Even among those who have engaged the most with these things, I believe the level and the interest for theoretical debate, the search for new solutions have gone down, because we are in a stasis, the acceptance of the principle that in the end we all do our disciplinary work and then we also use digital tools, the ones we use in communication as well.*[82]

He also brings up the difference with the previous time period, the mid to late 1990s, when most experiments and debates were happening in Italy, even if only among the

---

[80] "*tra poche decine di anni tutti saranno storici digitali nella misura in cui il lavoro sarà possibile solo padroneggiando gli strumenti e le problematiche del digitale".*

[81] *"se l'evoluzione del panorama degli strumenti, delle risorse, delle opportunità offerte dalla rivoluzione digitale per gli storici fosse più ricco, una quota più ampia di colleghi ne farebbero uso"; "innovazioni veramente così dirompenti che potranno cambiare tutto il panorama".*

[82] *"all'interno dell'ambiente di coloro che si sono più occupati di queste cose credo che anche lì sia un po' sceso il livello e l'interesse per il dibattito teorico, la ricerca di nuove soluzioni, proprio perchè siamo in una fase di stasi, quella accettazione del principio che in fondo facciamo il nostro mestiere disciplinare e poi utilizziamo degli strumenti elettronici che usiamo anche nella comunicazione".*

digital historians: "we actually quarrelled for a couple of days on these issues […] today that would be quite unimaginable".[83]

In order for that to happen, not only depth is needed, but also significant numbers. But still now, digital history in Italy is characterized by individual or small groups initiatives, located largely outside the routine accepted patterns of work (this is particularly true for IT-A, IT-B, IT-C, IT-E and IT-F), even when it is then recognised and incorporate into them ex post (IT-E). Numbers are obviously an issue, in relation to the discipline. "Digital history – says IT-AA – is still confined to a limited number of individuals, even though the number is growing".[84]

Even though there has been a high degree of mutual conversations and interest among early digital historians in Italy in the past, as IT-P recounts: "we have organized […] many seminars, meetings, discussions, exchange of messages on journals across fields", in the "group that is not a group" (IT-R), this is considered mostly a feature of the past.[85] The interviewees found it easy to mention other digital historians and/or digital history project in Italy and several mentioned more than one.

They have not reached, however, what IT-R calls a "critical mass" needed in order for the situation in Italy to change and the use of the digital to spread. [86]

3.3.2B CHALLENGES: IMPERMANENCE

This category emerges from two sets of data, referring to a *temporal dimension* of the participants' digital projects and the *autonomy/isolation* linked to their experience, which are connected in several ways.

[83] "*ci accapigliammo anche per un paio di giorni su questioni di questo genere"; "oggi sarebbe abbastanza impensabile".*
[84] *"la digital history è ancora confinata a un ristretto numero di persone, benchè il numero si stia allargando".*
[85] "*abbiamo organizzato un'infinità di seminari, di occasioni di incontro, di discussione, scambio di messaggi su riviste dell'uno e dell'altro campo"* ; "*questo gruppo che non è un gruppo".*
[86] *"massa critica".*

TABLE 19 - IMPERMANENCE

Properties	**Temporal dimension**	**Autonomy/isolation**
Indicators	First phase – Web - mid to late 1990s (IT-F, IT-B, IT-L, IT-M, IT-N, IT-AA, IT-P, IT-O, IT-R, IT-DD, IT-Q); "heroic times" (IT-P), "naïve times" (IT-F), digital turn (IT-Q); Second phase - Web 2.0 – early to mid-2000s (IT-A, IT-BB, IT-CC, IT-C, IT-E, IT-Q).	Independence from ICT support (IT-A, IT-C); independence (IT-CC) self - training, open source and free software (IT-A, IT-B, IT-F), isolation, danger of impermanence (IT-E, IT-B, IT-F), lack of funding (IT-B).

The category *impermanence* captures significant traits of these digital history projects in Italy and highlights the fact that these projects were undertaken with a high degree of autonomy but also largely in isolation, two faces of the same coin.

It is important to stress that this category refers to the projects created by the digital historians, rather than their general professional context and has its most significance in relation to the fact that a certain degree of experimentation was common to all these projects, despite the different technological and disciplinary circumstances.

Temporal dimension

The temporal dimension is relevant, not so much from an output perspective, i.e. to evaluate the specific projects within their temporal context, but because the participants identify the quality of experimentation they implemented according to these two time periods.

Firstly, all interviewees began or participated in their projects in one of two periods:

1. in the mid to late 1990s, which IT-F calls "the naïve phase", and IT-P "those somewhat heroic times", where a "certain amount of dilettantism" guided the first

experiments and the "degree of unfamiliarity" with the digital tools among historian was very high.[87] This period is called by IT-Q "the digital turn";[88]

2. from the beginning to the mid-2000s, when the Web, according to IT-Q "cannibalized" and then developed into Web 2.0, "the revolution of the participatory Web, the citizens' Web".[89]

Two of the interviewees (IT-Q, IT-F) demonstrate awareness of the existence of a previous phase, but none of them, or their projects belong directly to that phase. The relevance of what happened before is related to the legacy of that period, when history and computers were strongly associated with quantitative research methodologies and economic and social history, which still has a negative impact on some historians' perception of what kind of historians computers are for. IT-F mentions that "the digital is in fact a quantitative methodology" but quantitative methodologies, in his area, which is history of education, are still today considered "a niche field".[90]

Also, some of the younger interviewees are students of the senior ones: this is true for IT-A, whose mentor is mentioned in the interview, IT-R, who started his research in digital history under the supervision of IT-O, and IT-D, who works in specific training projects with IT-AA.

IT-M, one of the "first wave" digital historians, illustrates the two periods as follows:

> *The landscape from the 1990 to today has changed profoundly. It has changed in two aspects: on the one hand some expectations were fulfilled […] for instance the availability of sources, documents, texts, which has increased impressively; the other aspect is interactivity […] i.e. the emergence of virtual communities, of communities*

[87] *"quell'epoca un pò eroica"; la fase naive dei primi tempi"; "una certa dose di dilettantismo"; "il grado di inconsapevolezza era vastissimo".*
[88] In English in the interview.
[89] *"cannibalizzato";"una rivoluzione che è il Web 2, il Web partecipativo, il Web del cittadino".*
[90] *"il digitale di fondo è una metodologia quantitativa"; "è una cosa estremamente di nicchia".*

of interest who want to somehow work alongside and compete in a positive way with academic tradition […] this has exploded with the Web 2.0 in particular.[91]

IT-O presents the idea of a certain degree of ingenuity in the first phase: he recounts how initially historians tried to apply to the Web the criteria and methodologies they were used to without much change, by attempting to categorise Websites along strict, and traditional, methodological categories with the creation of indexes and repertoires and to design a methodology to critically evaluate online resources that could apply, and be taught, *a priori.* [92] This attempt, however, although logically and epistemologically justifiable, ended up in partial failure and this failure showed that new ideas and new methodologies were necessary.

Autonomy/isolation

This property is tied to the previsions one, especially in relation to the amount of technical support required in order to accomplish the projects themselves. On the one hand, for the first time period the respondents highlight the need they had to train themselves: for example IT-AA says "I learned to juggle better [these technologies]".[93] While this implies that it was possible for historians to initiate digital projects largely, but not totally, on their own, it is also recognised that this included some degree of dilettantism, when dealing with certain technical issues, in order for them to be able to proceed without having to "delegate to the IT people completely".[94] On the other hand, projects based on Web 2.0 technologies in the second time period, for instance those

[91] *"Questo scenario dagli anni 90 a oggi è cambiato profondamente; è cambiato da due punti di vista: da un lato si sono realizzate alcune aspettative [...] ad esempio la disponibilità di fonti, di documenti, di testi che si è dilatata in maniera impressionante; l'altro aspetto è l'interattività, [...] cioè l'emergere di comunità virtuali, di comunità di interesse che volessero affiancare in qualche modo, competere in maniera virtuosa con la tradizione accademica [...] e questo è esploso con il Web 2.0 in particolare".*
[92] *"questo tentativo anche di mettere a punto una metodologia di valutazione critica dei materiali sul Web e di creare gli indici di risorse, dei repertori, indicava proprio la sopravvivenza dei vecchi schemi mentali in qualche modo"*
[93] *"ho imparato a destreggiarmi sempre meglio".*
[94] *"deleghi completamente all'informatico".*

involved in the creation of blogs and podcasts, generally required even less external technical intervention: this has been the case for IT-A, IT-C, IT-E, IT-AA and IT-K and also IT-B and IT-F who have worked together. It must be noted, however, that the level of skills acquired, be it for desire to learn, aptitude or, in rare cases, formal training, has been quite significant in some cases, such as IT-D, IT-N, IT-P, IT-Q and IT-R, who have become ITC specialists in their own right. IT-AA also mentions in a positive tone, that with the acquired skills digital historians can not only work independently, but also have a profitable working relationship with IT experts.

This *autonomy*, largely seen as positive, is counterbalanced by a sense of *isolation* that makes the two elements converge into the category *impermanence*.

On a personal level, if and when the initiators cease to support and feed into the project, this will most certainly disappear. IT-E explains that she had initiated an online project in a previous position that was completely abandoned when she left.[95] A more extreme case is mentioned by IT-B, who recounts a different project that came under severe strain when the originator died and therefore, he stresses, this kind of projects is inordinately dependent on the individuals who create them.[96]

Academic digital historians who have started their project in the late 1990s to early 2000s, such as IT-F, IT-B, IT- L, IT-M, IT-N, IT-O and IT-P, have made it clear that specific funding was not available for these initiatives. IT-O maintains that the initial idea, common in the late 1990s, that the use of computers could directly save money on a large scale in the academic field quickly turned out to be quite inaccurate: this negatively influenced the commitment on the part of the funding bodies.[97] As a

[95] *"quando avevo fatto l'esperimento a ingegneria, sono andata via io ed è rimasto lì."*
[96] *"il generosissimo collega amico che l'aveva messo in piedi è morto e quindi queste cose sono molto dipendenti da chi le mette in piedi".*
[97] *"l'idea che attraverso il mezzo telematico si potessero superare dei vincoli di tipo economico era un'idea non dico peregrina, certamente no, ma era un'idea non del tutto corrispondente al vero."*

consequence, projects had to be limited to the lowest possible cost. IT-O's first project was created in a small office with IT-M, without external support, and no funding at all.[98]

The earlier career digital historians, such as IT-A, IT-C and IT-E, faced with the same constraints but new technological opportunities, have opted for low or zero cost highly user friendly software, such as *Blogger*, *Drupal* and *Wordpress*, all products of the Web 2.0 revolution. For IT-A "*Wordpress* can be used by absolutely anyone".[99] IT-E says: "I was able to use the blog because it was easier to use".[100] Nonetheless, all three have gone beyond the initial, easy choice, in order to make their projects better and more effective: IT-A was able to obtain the – free – services of an IT expert to deal with the more complicated templates offered by *Wordpress* as well as for the placement of the Website on *Google* search; IT-C moved to *Drupal* after having started with the simpler *Blogger* and IT-E was able to develop the initial blog with a connection to the official website of her institution, as well as other social network resources, such as Facebook and Twitter, but had to jump a certain amount of bureaucratic hurdles.

IT-E was able to tie the digital project more closely to her work, but she clarifies that

> *I have other duties and they are required of me; at the end of the year I do not need to account for this [project], it is some extra; it is not considered part of my job, even though they are happy it is there.*[101]

The challenge of *impermanence*, therefore, is related to time and to different, not well integrated phases of digital history in Italy, but most of all to a combination of *autonomy* and *isolation* that has an overall negative effect.

---

[98] *Tenga conto che questa initiativa è nata in uno studiolo della Scuola Normale, chiacchierando noi due, senza avere il minimo supporto di nessuna istituzione e così è rimasto per lungo tempo".*
[99] *"Wordpress fruibile assolutamente da chiunque".*
[100] *"io riuscivo a usare il blog perchè era più semplice da usare".*
[101] *"io come mansione ho altro e quello mi viene richiesto, io a fine anno non ne devo rendere conto, è una cosa in più. Non è considerato un obiettivo del mio lavoro ma sono contenti che ci sia".*

3.3.2C CHALLENGES: TRANSFERRING DIGITAL HISTORY TO EDUCATION

This issue of education in digital history has come to the forefront of the analysis from the open coding phase, see 3.1.2 *Challenges in education*. However, in the light of the emergence of the core category *developing digital history*, it was reanalysed. From the initial category, the critical elements, developed there in two properties, *scarcity* and *inadequacy* (3.1.2) were seen to be insufficient because they were unable to capture the data related to the possible and/or desirable content of training in digital history. These two properties were therefore brought together into an overall property *inadequacy* containing all the previously identified indicators, while a new property, *content issues*, is used to analyse the other aspect. Table 20 provides the modified properties and indicators.

TABLE 20 - TRANSFERRING DIGITAL HISTORY TO EDUCATION

Properties	**Inadequacy**	**Content issues**
Indicators	Generational gap (IT-A, IT-B, IT-N, IT-E, IT-F, IT-C, IT-K); technological gap; no one to skim through the overabundance of information (IT-CC, IT-L); lack of specialist personnel (IT-CC, IT-L, IT-A); lack of investment (IT-DD); limited number of experts and specialists (IT-BB); limited number of historians competent in the field; need for the intermediate professional profiles, linking history and humanities (IT-AA); bureaucratic obstacles (IT-CC); delay, slowness of change (IT-DD); difficulty in defining objectives/curriculum (IT-AA, IT-L, IT-O); lack of formal training (IT-D); team of people (IT-N).	Methodology (IT-AA); source analysis (IT-Q); Employment opportunities (IT-D); methodological guidance (IT-AA, IT-O); role of librarians (IT-E, IT-C, IT-O, IT-P); effect on training of teachers (IT-L); relationship with digital humanities (IT-D, IT-AA); teach Internet and the Web better to future historians (IT-B).

Inadequacy

This property brings together two properties previously identified, i.e. *scarcity* and *inadequacy*, for the full analysis of these data that was carried out during the open coding phase, see 3.1.2.

Content issues

The element that was missing in the open coding, as mentioned above, was *what* could be/should be/is taught to students in the field of digital history. This property emerged in the selective coding because it is more connected to *developing digital history* as the main concern of the participants.

Specifically, the starting point for the analysis of these data is the consideration, made by IT-D, that, despite the potential of the technologies for change, simply exposing young people to technology does not produce in itself a learning outcome:

> *computer technologies have a huge potential but it is not where people have looked for it until now, they are very different […] in the sense that there is something big, something important behind them, but at the same time it is a lot less visible than people expect: you give computers to kids, and nothing happens. What happens is that they learn to play on Facebook.*[102]

IT-O is very clear on this point on a negative note: what we should *not* teach them is that their lecturers, from the privileged view point of their experience and scientific knowledge, are able to provide a comprehensive list of resources or even a comprehensive list of criteria by which to judge and select digital resources for historical studies once and for all. This was attempted, according to IT-O, in the late

[102] *"le tecnologie informatiche hanno dei potenziali enormi che però non sono dove la gente finora li ha cercati, sono molto diversi [...] c'è qualcosa di grande, di importante dietro e che al tempo stesso è molto meno visibile di come la gente se lo immagina: dai i computer ai ragazzini e non succede niente: succede che imparano a giocare su Facebook".*

1990s, due to a certain pedantry on the part of the scholars, who believed that their disciplinary knowledge would be enough to guide their students even in a relatively uncharted territory. The experiments in this area failed. What is less likely to fail, though, is giving students the critical knowledge to understand and analyse the historical sources they find on the Web and letting them investigate on their own.[103] Historians have a clear role in this, but academic librarians have an important role to play, too. There are 3 librarians in this group of interviewees: IT-C, IT-E and IT-Q. They are all trained historians and have not only created digital history projects, but also have reflected on their role in digital history education. IT-E, for instance, explains that, because bibliographical material and reference work is now done mostly online, librarians have a training as well as professional advantage on any other member of academia regarding the provision of technical instruction to costumers/readers.

She says

> *Most of my duties are fulfilled by working online; the things that concern everyone are the digital resources […] online databases and electronic journals […]. Therefore we try to sensitise the lecturers, the students working on their dissertations and to show them that there are many interesting resources, created with good standards and completely free.*[104]

IT-O, who is not a librarian, is of the view that more training in digital tools, especially for the students, should be entrusted to the librarians: "today this is a job that librarians could do very well".[105]

---

[103] *"l'acquisizione dei mezzi concettuali della conoscenza critica delle fonti e poi l'avventura diretta del Web e la messa in pratica di queste precedenti consapevolezze critiche acquisite con mezzi tradizionali nell'uso delle risorse".*

[104] *"tutte le mansioni sono via internet, le cose che riguardano tutti sono le risorse digitali [...] banche dati e riviste elettroniche [...]. Quindi si cerca di sensibilizzare i docenti, i laureandi e poi far vedere che esistono risorse molto interessanti, realizzate come si deve e completamente gratuite".*

[105] *"oggi è un lavoro che possono fare in modo eccellente i bibliotecari".*

Other interviewees stress the importance of projects accomplished by libraries. IT-P, for instance, talks about projects created by small specialist libraries. They are rarely brought to the attention of a wider public, though, and therefore, do not have a strong impact on the wider environment at all. IT-E, however, warns that even the most innovative and interesting projects within local and/or small libraries have very little potential for being known, let alone for producing long lasting effects or creating new connections. She says that, even among librarians and even in their online communication environments, it is very rare that information is shared for these purposes.[106] IT-O also laments the scarcity of nation-wide initiatives "of the breadth and importance comparable to the ones I have mentioned", i.e. *Bibliothèque Nationale de France*, British Library, and Library of Congress.[107]

On a more general level, IT-D queries not so much the potential for change, because he maintains that this could "revolutionise" the educational environment, but the methods employed until now, aimed at boosting the appearance of change and rhetorical effects rather than real change. [108]

The most notable exception to the lack of formal training opportunities in Italy is the University of Pisa, mentioned by five of the interviewees (IT-D and IT-AA, who are directly involved in the programme and IT-O, IT-Q and IT-R, who are aware of it) because of its degree course in *Informatica Umanistica* (Humanities Computing). IT-AA maintains that the apparent triviality of the difference between humanities computing and digital humanities is contradicted in the Italian language, where

[106] *"mailing list dei bibliotecari italiani [...] è raro che venga dato un annuncio ufficiale della realizzazione di una biblioteca digitale".*
[107] *"sono scarsissime le initiative di ampiezza e importanza paragonabile a quelle che ho appena citato".*
[108] *"le conclusioni importanti, specie nell'educazione, porterebbero non a ritoccare il panorama ma a rivoluzionarlo. Io sono molto fiducioso sulla portata di queste cose ma al tempo stesso assolutamente diffidente verso i modi più vistosi con cui tutto questo è stato affrontato e la retorica che c'è stata dietro".*

Informatica Umanistica clarifies that the graduates are essentially ITC specialists, who will be able to deliver on a wide range of projects and skills applicable to the Humanities and to the cultural sector in general. She wonders

> *The students only have about 50% of their curriculum in the Humanities and therefore they are much less trained in that field than their counterparts in Humanities, History and Cultural studies. Is basic training in both ITC and humanities better than an ITC specialisation after a degree in the Humanities?*[109]

Another topic that emerges from the data is the training of doctoral students. All respondents who mention this are in agreement that nothing or near nothing is done, even though they say that this is a necessary step towards a wider and better use of these tools and methodologies in academia. IT-O, for instance, makes the simple observation that "no PhD thesis has been produced in a form that is not the traditional form".[110]

This is a combination of circumstances but also depends on the attitude of the students. In IT-M's view, while they might be open to the use of new technologies, but they are not necessarily be prepared to direct their research towards digital history, for "fear of defining themselves as historians of a different kind", they demonstrate some sort of "psychological obstacle" to differentiate themselves too much from tradition, in case that means increased difficulties in being accepted by the "corporation".[111]

IT-R describes exactly this situation when he recounts his own decisions regarding the topic of his doctoral degree: after having addressed a digital history topic in his

[109] *"gli studenti affrontano solo il 50% del percorso formative in ambito umanistico e sono quindi molto meno preparati in quell settore che i rispettivi colleghi di Lettere. Storia e Beni Culturali"*
[110] *"nessuna tesi di dottorato viene prodotta in forme diverse da quelle tradizionali".*
[111] *"timore a configurarsi come storici di diverso tipo"; "remora psicologica [...] come se essere più attaccati alla tradizione desse qualche garanzia maggiore di accettazione da parte della corporazione".*

undergraduate thesis, he decided to choose a traditional topic for his PhD, with the view of starting an academic career, because

> *digital history was not a recognised discipline at an institutional level and therefore if I had framed my whole career on output with only limited scope would have been counterproductive for me, that is, I would not have shown my future examiners that I had a credible training as a professional historian.*[112]

IT-C, in her role as a librarian, witnesses students but also young researchers who tend to use the lack of training "from above" to avoid exploring and challenging the situation by themselves and she judges this phenomenon as highly negative and almost "inexcusable". She says

> *the new people, the PhD students, the researchers today who are younger than the lecturers, I believe they have no excuse not to inquire, experiment a bit, even in what is not taught from above but are taught in other countries, anyone can be informed, can understand a bit how it works.*[113]

Also, IT-N mentions a negative consideration on international PhD programmes, where of course the opportunities to use digital tools would be ample, but instead most of the times the student just end up "physically moving" to the other country. [114]

On the positive side, it is clear that having a digital historian as a supervisor and a mentor will be a much stronger encouragement to address digital history as a topic of research. This happened, specifically, to IT-R, IT-A and IT-D (in the field of digital humanities).

---

[112] *"la digital history non era una materia riconosciuta istituzionalmente e quindi impostare un'intera carriera su produzioni che erano esclusivamente di piccolo stampo sarebbe stato controproducente, cioè non avrei dato dimostrazione ai futuri valutatori di avere una formazione credibile come storico professionale".*

[113] *"anche i nuovi, i dottoranti, i ricercatori oggi che sono più giovani dei docenti credo che non abbiano scuse per non informarsi per praticare un po', anche delle cose che non vengono insegnate dall'alto ma vengono insegnate in altri paesi, ognuno si può informare, può un po' capire come funziona".*

[114] *"vedo che i nostri dottorandi si muovono fisicamente".*

Employability is also connected to the development, on the part of historians, of skills that are valuable beyond the realm of academia, especially considering, as IT-M and IT-D say, the job market in academia in Italy is saturated and historians try and often succeed in other professions, they teach in schools, works as journalists, public servants, librarians. This is, in the words of IT-M, linked to the possibility that

> *a new profile of historian may emerge, who would then have in the web an excellent operating environment, because those dimensions of a parallel community, possibly even in competition with the university.*[115]

If this is not to happen by pure chance, then of course how university prepares them for work is crucial.

Lastly, since the university context is also where school teachers are trained; there is an important element to be considered for the training of particularly undergraduate students who will join the teaching profession. Due to the crisis of the university recruitment system, there are cases of PhD holders who go into school teaching, but that is not, obviously, the norm or what they are in effect trained to do. "Given the present inaccessibility of the research career, the situation is really sad, really depressing", in the words of IT-M.[116]

IT-L, who is involved in the training of high school teachers of history, goes as far as saying that the whole cycle of the education system is creating a negative situation, where teachers who train in universities do not come into contact with digital tools and methodologies, and then work in schools where they are unable and unprepared to

[115] *"è possibile che si ridefinisca un diverso profilo di storico che allora sì nel web trova un contesto operativo eccellente perchè si possono esaltare quelle dimensioni di comunità parallela e probabilmente anche competitiva rispetto all'università".*
[116] *"Data la chiusura attuale degli sbocchi per quanto riguarda la ricerca, è veramente triste la situazione, è veramente deprimente".*

bring about any change, and therefore do not prepare their own students to expect or even less demand technology in their own university education.[117]

3.3.3 DISCIPLINARY CONTEXT

Digital history as part of the field of historiography is influenced by and influences it in several ways. None of the interviewees explicitly identify digital history with a new existent or emerging discipline; however, this does not mean that they do not see their activities within digital history as having elements that point to something more organised and systematic than the experimental and often disconnected nature of these activities would suggest. For this reason, the categories linked to the disciplinary context show mostly, but not exclusively, a negative aspect, indicating what is missing in the relationship between historiography and digital history rather than what digital history is building up to be or could be in the future.

3.3.3A DISCIPLINARY CONTEXT: DE-CONTEXTUALISATION

The category *de-contextualisation* pertains to the disciplinary context because represents the data that illustrates the *lack of resources* dedicated and available and the *absence of a nation-wide context* for the development of digital history.

TABLE 21 - DE-CONTEXTUALISATION

Properties	**Lack of resources**	**Absence of a nation-wide context**
Indicators	Lack of funding (IT-B, IT-F, IT-O, IT-M); Lack of organisational resources (IT-B, IT-N); Lack of technical competence and skills (IT-A, IT-B, IT-CC).	No centralized planning (IT-E); lack of effective large scale initiatives, benchmarks and frameworks of action; Lack of system-wide initiatives or understanding (IT-B, IT-M); null to negative effect of large top-down projects (IT-D)

[117] *"c'è sempre un circuito tra università, insegnanti di scuole secondarie e insegnanti di scuole primarie".*

The category *de-contextualisation* emerges from a combination of data that indicates absence of what the interviewees consider the essential requirements for work in an academic discipline. This category is particularly rooted in the data from interviewees who work in academia, but not exclusively.

Lack of resources

This property involves first and foremost the lack of opportunities for proper funding of digital history projects.

In this respect IT-B and IT-F, who have worked together on a digital project across two universities, are particularly clear. IT-B explains that his first digital initiative was based on 5% of the total funding for a project that was aimed at something different.[118] IT-M describes the funding situation of Italian universities in general as "very difficult".[119] More specifically, IT-O says that, while the belief that the use of computers in history would lead immediately to savings in terms of financial costs turned out to be misleading, as highlighted in the context of the category *impermanence*, the Italian situation was made even worse by the absence of specific lines of funding for digital projects.[120] Because of the lack of recognition of these initiatives in their own right, scholars could not afford to present funding applications for them in place of the "normal" applications for their research topics. The situation, according to IT-O, is still largely unchanged today. He says:

[118] *"noi ne abbiamo spesi il 5%, gli altri sono andati ad altre cose".*
[119] *"l'università italiana vive un momento molto difficile".*
[120] *"l'idea che attraverso il mezzo telematico si potessero superare dei vincoli di tipo economico era un'idea non dico peregrina, certamente no, ma era un'idea non del tutto corrispondente al vero".*

> *it was not possible for us to present applications specifically with an online journal or digital library as the main focus, this is to say that this problem has never been solved and it is not solved in many ways still now.*[121]

Moreover, IT-B highlights the issue of having enough staff to propose digital history projects for funding. Since every scholar's time can only be committed once, it is very hard for digital historians to put together a sufficient level of resources for the projects to be credible. IT-M lists a series of practical problems that fall into this category and are exemplary of this situation: "the structures are temporary, the servers do not work; there is a lack of technical support in the departments".[122]

In sum, IT-B stresses that there is a

> *need for resources, especially human resources that we never had again [after an experimental project had ended] and that in the very near future I do not foresee that I will have.*[123]

Absence of a nation-wide context

This property refers primarily to the absence of official recognition of the work done in digital history and of effective centrally initiated or facilitated projects.

IT-B clarifies that, while "in Italy no one can dedicate all their time to digital history", the situation is made worse by the fact that digital products are not relevant for the evaluation of academic work, at local or at national level.[124]

---

[121] *"non ci era possibile presentare dei progetti specifici che avessero la rivista o la biblioteca telematica come oggetto principale, questo per dire che questo problema non è mai stato risolto e non è risolto tutto sommato nemmeno ora."*
[122] *"strutture che sono molto precarie, i server che non funzionano, il supporto tecnico all'interno dei departimenti che manca".*
[123] *"ci vogliono risorse, soprattutto risorse umane che non abbiamo più avuto e che nell'immediatissimo futuro non prevedo di avere".*
[124] *"in Italia nessuno si può dedicare a tempo pieno alla storia digitale".*

The interviewees, moreover, mention the lack of effective large scale initiatives, benchmarks and frameworks of actions that would create a more conducive environment for innovation in the medium and long term. Put simply, "there is no centralised planning" (IT-E).[125] Even the institutional archives, such as those of the Houses of Parliament, are still not very advanced, as IT-CC comments.

IT-D, expressing a consideration that involves the whole national scientific environment in the humanities, says

> *Italy is undergoing a period of total immobilism, because the people [in power] are still the same, there is no turnover*[126]

and on the other hand, regarding the few initiatives that are undertaken,

> *in a situation like this there is everything and the opposite of everything […] and it is all quite irrelevant because there is nothing with which to measure the relevance of this process, which means that in the end pressure one way and the other for conservatism and for change tend to annul each other, because there is no direction, there is a general drift.*[127]

Without a "critical mass of scholars who believe in this" (IT-D), there can be no overall strategy and no long term achievement, regardless of how interesting and well implemented individual projects may be.[128]

IT-F, along the same lines, comments that the whole "educational and scientific system" in Italy does not encourage innovation, does not support young scientists, new ideas, or experimentation, but values "mainstream" research, in the negative sense of

---

[125] *"manca la programmazione centrale".*
[126] *"L'Italia ha un momento di immobilismo totale perchè le persone sono quelle solite, non c'è ricambio".*
[127] *"in un clima come questo [credo] che ci sia tutto e il contrario di tutto [...] e tutto è abbastanza irrilenvante perchè non c'è nulla su cui misurare la rilevanza di questo processo, il che significa che tutto sommato spinte e controspinte alla conservazione e al cambiamento spesso si annullano a vicenda, non c'è una direzione, c'è una deriva generale".*
[128] *"non c'è una massa critica di persone che credono in questa cosa".*

"research as it has always been done".[129] This is due, among other things, to a wide generational gap, described in particular by IT-B, not only between the scholars and the students, but most importantly between the scholars and the higher ranks of administration and organisation of academia. This creates further resistance to change and difficulties in understanding and adopting new technologies.[130] IT-M expresses the same concern, blaming the inability of top management to accept and embrace innovation on their seniority: "I am not young, I am 59 [...] but it is the generation before me that has led the university up to now and still does".[131] IT-P expresses a very similar view when he talks about the absence of any "sensitivity" on the part of the institutions for the need to support digital history in Italy, except for some "disproportionately large projects, generally unsuccessful".[132]

This top down approach is criticised by several interviewees: IT-E for instance mentions the

> *Internet culturale, the famous Italian digital library, I see it as an utter failure […] I do not think they have not spent money on it either, [but] sometimes I happened to find sources that were not readable or broken links.*[133]

In sum, the disciplinary context for digital history is lacking and incomplete even when digital history is firmly located with the context of historiography.

---

[129] *"un sistema paese che valorizza pochissimo l'innovazione, i giovani, le nuove idee, la possibilità di sperimentare; quindi viene valorizzata molto la ricerca 'mainstream' con tutte le sue caratteristiche, non solo concettuali ma anche di supporto alla ricerca come si è sempre fatto".*

[130] *"se il mio termine di confronto è qualcuno che è normalmente una generazione più della nostra, della mia senz'altro, della sua due magari".*

[131] *"io non sono giovane, ho 59 anni [...] ma la generazione che ancora mi sta alle spalle è quella che ha retto l'università fino...e tutto'ora regge le università".*

[132] *"non c'è stata una sensibilità istituzionale", "tendenza a grandissimi progetti in genere fallimentari".*

[133] *"Internet culturale, la famosa biblioteca digital italiana, io lo vedo come un fallimento assoluto [...] non credo neanche che non siano stati spesi dei soldi, a volte mi è capitato di vedere cose illeggibili o link a vuoto".*

3.3.3B DISCIPLINARY CONTEXT: DIGITAL HISTORY AS A DISCIPLINE

This category emerges from the questions raised within the previous category and has two properties, *discipline development* and *sub-disciplinary differences*. They deal with epistemological questions on the disciplinary boundaries between digital history and historiography and the elements the interviewees bring to bear in relation to their own or other scholars' specialisations.

TABLE 22- DIGITAL HISTORY AS A DISCIPLINE

Properties	Discipline development	Sub-disciplinary differences
Indicators	"auxiliary" discipline; digital humanities not a discipline (IT-AA); branch of history/branch of digital humanities; practice, *techné* (IT-BB); digital history is not recognised officially, the discipline should be digital humanities (IT-R); difficult to determine a curriculum for a digital humanities degree (IT-D).	different sub-disciplines / different paths to digital (IT-BB); Economic historians (IT-R); quantitative educational history (IT-F); quantitative methods initially (IT-M); contemporary history (IT-A) socio-economic history (IT-AA; IT-A); history of political thought; making documents available, sharing (IT-BB); oral history/ contemporary history (IT-K); medievalist versus contemporaneist – more attention to discipline specific projects (IT-P); medieval history (IT-AA).

Discipline development

First of all it is important to highlight that 11 of the participants explicitly mention that the first wave of digital history in Italy in the late 1990s coincided with not only their personal experience of first addressing these issues (see property *temporal dimension* of the category *impermanence*, 3.3.2), but also with a series of digital history projects, initiated by themselves or others, but largely disconnected from each other. The participants who have started their experience with digital history in the mid-2000s are even more independent and isolated, with their projects having even less direct and positive influence on their professional life. This is referred to in the category

impermanence (3.3.2) but also the property *identification* within *marginalisation* (3.3.2).

All these elements point to a lack of development of a possible discipline of digital history as a structured, organized environment for professional activities of the historians involved in this study.

IT-R is quite specific on the issue of establishing a discipline and stresses the view that it is preferable to promote digital humanities as a field rather that digital history, because otherwise we run the risk of creating "enclosures that are smaller and smaller and in the end become self-referential".[134] As mentioned above, the creation of a discipline/field would support the national recognition of the discipline itself, which is what IT-R points to. However, according to IT-D, who has a long experience with the undergraduate degree in humanities computing in Pisa, it would be difficult to translate a field such as digital humanities into a specific course of study, because on the one hand "anything that is done in the field of humanities with a computer can be called digital humanities", but this reflects more an "attitude" rather than a "series of definable practices" and at the same time the disciplinary focus of all humanities subjects cannot be underestimated, because the "solidity and depth and of the discipline is the factor that cannot be compared, of which the digital is just a variable".[135] IT-BB also makes this point, by stressing the "τέχνη", the "craft" aspect over the disciplinary aspect.

In terms of career, Italian digital historians have little if anything to say about the contribution of their work in digital history towards formal professional recognition and

[134] *"avrebbe significato creare dei recinti sempre più stretti, dove poi alla fine erano qualcosa proprio di autoreferenziale".*

[135] *"qualsiasi cosa si faccia con materiale umanistico usando il computer può essere definito digital humanities"; "è forse più un atteggiamento, non una serie di pratiche definibili";"davanti alla solidità e alla profondità della disciplina c'è un dato incomparabile, il digitale è solo una variante".*

promotion. IT-P is convinced that, if he had not dedicated the time he has to digital history, he probably would have had the time to write "a couple of books on medieval history".[136] This summarises this point very effectively.

IT-R argues that digital humanities has been greatly weakened in Italy by the absence of a disciplinary field; if a field existed, the reliance would not have had to be on

> *the person per se but the position that one person after another would have taken and therefore would have had to have specific competencies for that.*[137]

Sub-disciplinary differences

Several interviewees highlight differences among specialisations in historiography *vis à vis* digital history. IT-AA supports the view that

> *a contemporary historian cannot avoid addressing digital history, while a medievalist could survive (badly) without it. There are borderline areas that, apart from the chronological angle, imply knowledge and skills belonging to digital history: building historical and archaeological GIS for instance of 3D models of historical buildings, digital libraries, wordlists and occurrences of words/meanings and so on.*[138]

Contemporary historians will have to deal with digital history "in so far as some contemporary events take place exclusively or largely online and primary sources are created and destroyed on the Web (for instance Facebook profiles)".[139] IT-A also identifies contemporary history as a privileged field of application of digital history,

[136] *"io avrei potuto scrivere un paio di libri di storia medievale se non avessi fatto tutto quello che ho fatto."*
[137] *"non è tanto la persona in sè quanto è la cattedra che viene occupata di volta in volta e quindi chi la occupa deve avere competenze di quel settore."*
[138] *"uno storico contemporaneista non può non occuparsi di storia digitale, mentre un medievista potrebbe sopravvivere (male) senza. Ci sono poi aree borderline che, a prescindere dal taglio cronologico, implicano conoscenze e competenze di storia digitale: costruire GIS storico-archeologici ad esempio o modelli in 3D di edifici storici, biblioteche digitali, lemmari e occorrenze di parole/significati nei testi ecc."*
[139] *"esiste poi una storia digitale nella misura in cui alcuni avvenimenti contemporanei si consumano totalmente o in gran parte sul Web, come sul Web si creano e distruggono fonti primarie (ad esempio i profili di Facebook)."*

both due to the closer link of contemporary history to the present and therefore to the public's interests, which is better served by the use of "fluid communication" and "instantaneous" digital media in historical dissemination and communication, in order to "stimulate debate and expand the number of people interested in these topics" and also due to the nature of contemporary history itself, which requires an ampler use of non-printed sources and multi-disciplinarity.[140]

IT-BB, from his perspective as a historian of political thought, connects this specialisation with the availability of documents and sharing that the digital allows and more importantly, "different sub-disciplines are trying to find their own path to digital culture. This is a valuable effort as there is no single way of using digital tools for history".

A methodological issue is also introduced by considerations related to digital history and quantitative methodologies. IT-F raises the point that he personally was oriented towards quantitative research, a niche choice in his field in Italy and therefore had more use for computers *per se*, while IT-M makes the more general point that

> *initially the relationship between computers and history was very much linked to quantitative methods […] it has been difficult in the beginning demonstrating that these different horizons were not typical of a specific kind of scholar, who was driven to technology and computers, but they involved everyone in a profound way*.[141]

In sum, it is a shared view among the participants that considerations of different specialisations and methodological choices without the field of history produce a

[140] *"comunicazione più fluida" "per stimolare il dibattito e allargare la rete di persone interessate"; "c'è l'istantaneità che di solito la rivista scientifica non ha".*

[141] *"Inizialmente il rapport informatica-studi storici era molto legato a metodologie quantitative […] è stato faticoso nei primi anni dimostrare che questi orizzonti diversi non erano tipici di uno storico particolare, uno storico un po' tecnologizzante, informatizzante, ma erano cose che coinvolgevano profondamente tutti"*

tension towards different approaches to digital history but also potentially further pressure against a shared vision of how digital history works and how it should develop.

3.4 A SUBSTANTIVE THEORY OF BEING A DIGITAL HISTORIAN IN ITALY

The theory answers the research question, *what does it mean to be a digital historian in Italy,* and what *are the implications for history education?* by identifying the main concern of the participants and their strategies to address it. Previous sections detailed the elements of the theory.

A grounded theory can be presented diagrammatically (Figure 4), but it remains "an emerging path" (Glaser, 1998, p.15), always modifiable by constant comparison.

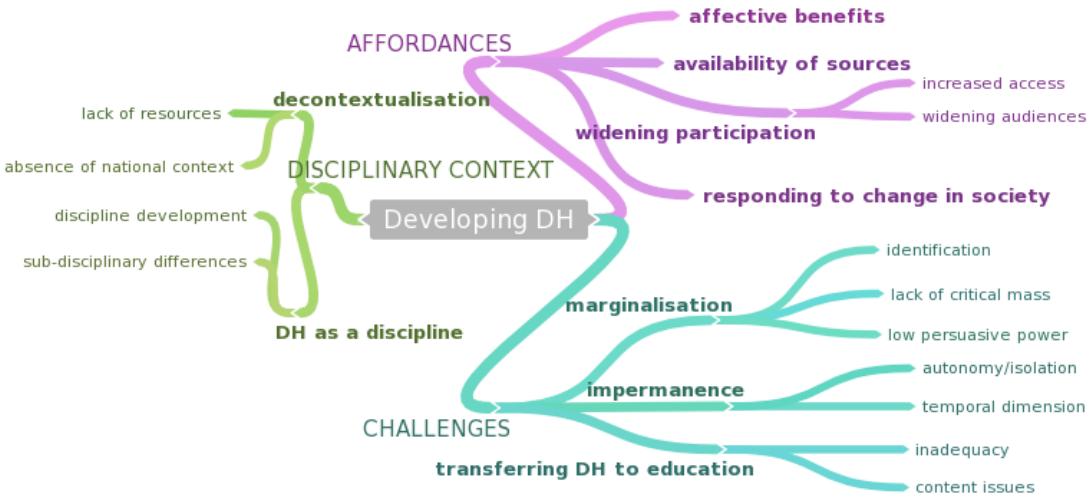

FIGURE 4 - A SUBSTANTIVE THEORY OF BEING A DIGITAL HISTORIAN IN ITALY – FULL THEORY

This theory contains nine substantive categories (*affective benefits, availability of sources, widening participation, responding to change in society, marginalisation, impermanence, transferring digital history to education, de-contextualisation* and *digital history as a discipline*), linked by three theoretical categories that also connect

them to the core category. *Affordances* present a combination of motivations and opportunities that the digital historians embrace, despite some critical elements.

Developing digital history is constrained by *challenges* related to *marginalisation* of the digital historians, the *impermanence* of their efforts and accomplishments and the difficulties in *transferring digital history into education* for history students.

The digital historians see also *developing digital history* in the disciplinary context. They see digital history as *decontextualized* most of all with respect to the resources and the national context necessary to structure research activities and educational programmes. They also consider where digital history fits in terms of the *discipline* of historiography and the possibility of digital history developing as a discipline in itself and its relation, in either case, with sub-disciplines of historiography.

The affordances outweigh the challenges in numbers (4 to 3), but the obstacles to the development of digital history in Italy are significant, with the issue of *transferring digital history to education* probably the most critical.

The benefits are concentrated on the individual, as an affective, personal, pioneering experience or as a practical, matter of fact advantage, thanks to the availability of sources and better chances in access and output for those who would otherwise have limitations in both, and finally for a chance to respond to changes appearing in society, but again only for those who are willing to do so and face the consequences.

On the other hand, the challenges present themselves all in the professional sphere: *marginalisation* and *impermanence* characterise the effects for the digital historians of their activities in this area, while *transferring digital history to education* highlights the challenges but also the suggestions and the experience the digital historians have in teaching digital methods and tools in a university context.

A further step in the constant comparison process is to compare the substantive theory with data from another substantive area with a view of possibly formulating a formal theory with explanatory power at a higher level of abstraction (Glaser, 2007). In this case, as outlined in the data collection section (2.3.3), this comparison was done with selective illuminative data from interviews with digital historians in the UK. The following section 3.5 analyses this comparison.

However, firstly, is it important to consider the issue of evaluation of the theory, with respect to the criteria set by the methodology ("each method deserves its own set of judgement criteria", Corbin and Strauss, 2008, p.302) applied to, in this case, "discover" it (Glaser and Strauss, 1967). The purpose of the evaluation in general is to judge the scientific "quality" of the research (Corbin and Strauss, 2008, p.297), but also the quality of the study's contribution to informing professional practice (Elliott and Lazenbatt, 2005).

As indicated in section 2.2, a (classical) grounded theory must fit the data, work to explain the main concern of the participants and how they solve it, must be relevant to the field and the participants and must be modifiable. The theory in this study fits the data, as shown by the application of the process of constant comparison; it explains the main concern of the participants in their role as digital historians and how they see and address the affordances and challenges connected to this role and how they evaluate the positioning of digital history with respect to the field of historiography. Therefore, the theory is relevant to them from a reflective practitioner perspective because it conceptualises their attitudes and evaluations and sets them in a framework that effectively connects the various elements. Finally, the theory is modifiable and this will be shown in the next section, 3.5, when the theory is compared to data emerging from interviews conducted with digital historians in the UK.

Overall, this theory responds to the general criterion of "credibility", chosen by Corbin and Strauss (2008) to express the evaluation of qualitative research in a way that leads to an assessment of quality of the findings, but also of the process undertaken. Having discussed in detail the research process and the generation of the theory from the data, and all the safeguards and measures adopted to ensure methodological consistency, the findings of this study can be considered credible, specifically "trustworthy and believable" (Corbin and Strauss, p.302).

3.5 A COMPARISON WITH DATA FROM THE UK

The literature review identified that digital history in the UK as a source of data could be effectively contrasted with the Italian case, primarily as a case of scarcity versus abundance, together with other elements (*Introduction*, p. 10-11). Ten digital historians and humanists in the UK, selected through theoretical coding with the same criteria used for Italy, were interviewed (2.3.3b), on the basis of the same questions (section 2.3 Table 4).

The data analysis in this second part of the main study began on the basis of the emerging theory from the Italian case. This is not only in agreement with the purposes of the study, but it also works as an element of evaluation, by constant comparison, of the theory itself, as indicated in 3.4. Doing a study of the UK case on its own was beyond the scope of this research, but it is recommended in the *Potential for future research* (4.5).

The comparison is based on the core category *developing digital history* and this category is confirmed by the connections of the other categories in the UK case. The theoretical codes, however, show a significant shift, due to one key difference between

the two countries: how digital historians experience the *disciplinary context* in their professional practice. This category will be discussed first in 3.5.1.

The other two categories that have emerged from the data as particularly relevant were *transferring digital history to education* (3.5.2) and *widening participation* (3.5.3). The overall appearance of the theory, as modified for the UK case, will be presented in 3.5.4.

3.5.1 DISCIPLINARY CONTEXT

This category represents the area where differences between the situation in Italy and the UK are the most relevant, precisely because a disciplinary context is available, i.e. digital historians in the UK can operate, research and teach as such.

The UK, according to the interviewees, is characterised by a favourable environment, where the "water level" of the use of technology in scholarship is "rising" (UK-C) and resources, communication, tools and funding are available. This allows the *affordances* and *challenges* of digital history to be set in the *disciplinary context*, while negating the *marginalisation* and *impermanence* of the Italian case. A "mature stage" (UK-A) of accepted digital culture allows digital historians to push the boundaries even further and experiment with the newest and least explored technologies in their research and teaching, those who keep the innovative edge alive.

Also, all historians interviewed in the UK are academics, including two PhD students: this is not an *a priori* design feature of the research (see *Data gathering in the UK* 2.3.3b), but a consequence of theoretical sampling. Many more digital historians work in the UK than in Italy. The negative aspect is that, while digital historians in the UK are more numerous, they also stand out less, "they don't appear anywhere", because "the base level is much higher" (UK-A): it is "more difficult to find the real pioneers

and innovators" (UK-A), especially now that the Association for History and Computing has ceased to be the focal point of their community.

UK-A states that, when the Association was in its first years "20 or 30 years ago", the situation was characterised by "a few people and a lot of goodwill": "we were all pioneers together". UK-C is even more specific and talks about "several different waves to the introduction of computer technology to history", beginning with the introduction of databases and the initiative, led by the newly founded Association, to bring together the historians who were working individually. The Association was therefore created mainly as a "support network" (UK-C), to "try and first of all bring people together" (UK-D) and give them a "voice" and an "identity" and it has greatly influences the way of thinking in terms of the viability and possible impact of the use of computers in history. However, it is now in a "state of abeyance" (UK-A).

UK-A is of the opinion that, "you are always going to have people who will be prepared to take risks, who are early adopters" and those who show "a cultural mentality about taking risks and trying things", are like to also experience "a sense of being isolated". On the other hand, "as the technology gets easier", more people are willing to risk their time and efforts to experiment, conscious that they might also get benefits. Therefore, it seems that the risk/benefit analysis is more favourable to digital history in the UK, even in the face of lingering scepticism, especially "about some of the more sophisticated stuff", as UK-H says and to "whatever the newest thing is" (UK-A) and even occasional hostility, in the words used by UK-G, when the widespread use of technology threatens certain "vested interests". These remarks, though, are not connected by the interviewees to an experience of *marginalisation* (3.3.2a) as was the case in Italy.

In sum, as UK-A states, "technology is pretty much embedded in history research and teaching in the UK", even though the field of digital history is not necessarily fully developed as a teaching field.

3.5.1A AFFORDANCES IN THE DISCIPLINARY CONTEXT

UK interviewees indicate *affective benefits* as an affordance of digital history, such as "always interested in technology" and "interested in trying different things" (UK-A), "for me, it was just something that I happened to always be interested in" (UK-E), "that was fun" (UK-H). However their attitude is best exemplified by UK-J, who describes the reason for his involvement in digital history: "mainly through being involved as a member of staff in various digital projects within the universities in the UK".

UK interviewees, accordingly, have a more positive *identification* with the label "digital historian", thanks to their clear professional ties with the digital, exemplified for instance by their membership of the Association for History Computing (UK-A, UK-C, UK-D, UK-H) or by their affiliation with digital history/humanities centres (UK-B, UK-E, UK-F, UK-G, UK-J).

Another important element that has developed in the UK is *funding*. UK-H illustrates very clearly the pattern of funding availability for digital projects in the UK and, even though this pattern has changed over time and, while he says that "you can no longer get money […] just to create a useful [digital] resource" and that most 'brute force' digitisation projects are now done by commercial providers, it is still clear that the funding itself has not disappeared. "Where the money is now in academia" he says "is for creating, maybe, tools to exploit all of these electronic resources".

The fact that funding has been available in the past for large scale projects and that it is still available for projects based in academia is crucial not just for the survival of digital history as such, but also because of the persuasive effect that successful projects can

have on the discipline and the national educational and research environment as a whole. Italian interviewees were unable to mention a successful large scale project conducted in Italy, while they rarely failed to mention the US project *The Valley of the Shadow* and highlighted the negative impact of some serious mishaps (IT-P) in this field. In the UK nearly all interviewees mention in very positive terms at least one large hugely successful digital history project, the Old Bailey Online, which, admittedly "made a big splash and the rest is history" (UK-H).

The combination of availability of funding and pressure from institutions and management on scholars to pursue innovation in the digital sphere, considered together as "top-down mechanisms" (IT-A) actually end up helping "people who are pioneers", by creating a context to channel their initiatives and ideas. In the absence of such mechanisms, "those people [the pioneers] are doing it for themselves, not for their institutions. They don't get any reward for it. It becomes very hard. Then, there is no incentive and reward" (IT-A). All this mirrors very accurately what Italian interviewees have described.

3.5.1B CHALLENGES IN THE DISCIPLINARY CONTEXT

A common topic with the Italian interviewees is, on the other hand, the idea of a *lack of critical mass* of digital historians with respect to their colleagues.

Most UK interviewees mention, as their Italian counterparts, a tendency to "conservatism in the profession" (IT-A), and "history is still a remarkably conservative discipline" (IT-B), and "as a profession, historians have tended to be quite conservative […] you have to wait for them to die or retire before changes happen" (UK-G). UK-H more moderately states that "historians are a conservative bunch of people".

Very similar words are used by UK-A and UK-D, or by UK-B, who highlights to "need for a bit of a cultural shift"; interviewees in the UK still advocate a cultural change, as

do their Italian counterparts, but only after having declared the use of most of the "basic" digital tools, including digital primary sources, as within mainstream historical practice.

Another challenge, even if it is located within the largely positive disciplinary context for digital history in the UK, is the issue of *digital history as a discipline.*

Most respondents in the UK point out that "mainstream" is not only referred to the widespread availability of (now) basic digital equipment and software, but also to digital history being part of the highly developed – at least in the UK – field of Digital Humanities (UK-F and UK-E, as digital humanists, highlight the importance of keeping a strong connection between digital humanities and digital history), and this has promoted digital history in the UK to a stage of maturity, where scepticism is largely reserved for projects "at the edge of the spectrum" (UK-A) even for digital scholars.

The strength of disciplinary focus is not to be underestimated, not only in the development of digital projects and tools, but also in what of the digital should be taught to the new generations. UK-D, however, strongly warns against an excessive fragmentation and stresses that the digital humanities must remain inclusive and receptive to new fields and to the social sciences in particular.

On the presence of research centres and departments specifically for digital history as opposed to digital humanities, UK-E expresses a mixed view: on the one hand, she says "it's very hard to know whether having centres would make a difference" but certainly, in order to make a difference, they must be "attached to departments and have a teaching function". UK-B warns against the risk of fragmentation of the disciplines, and also expresses the view that "the overall label of digital humanities is quite a good one" but at the same time he says that it "would probably" help to push digital history further in order to strengthen the social science end of the discipline in the digital

sphere. Centres and departments of digital humanities, according to UK-B, are crucial to set up "a stable core funded space": this is important to create the environment to develop digital methods. However, he says, "you have to create a solo to help something survive". However, UK-J goes back to the positive aspects of mainstreaming by expressing the hope that

> *in 10 or 15 years' time it would be right to disband all the departments of digital this and digital that, because we will all know what they are talking about and it will have become mainstream.*

Some interviewees with direct experience of the United States and Canada offer considerations on the situation on the other side of the Atlantic. UK-E suggests that digital history in the US is much more independent from digital humanities:

> *I always have this clear feeling that [in the United States] digital history people are quite different to digital humanities people.*

She attributes this mainly to the specific origin of digital history in the US from *cliometrics* and the stronger tie to the social sciences.

UK-H provides a historical perspective on this element as well: coming from the US, where he had been using computers in his studies since undergraduate level, to the UK when digital history was in its infancy even at research level, he witnessed in person the difference in attitude towards the use of computers and databases in history, which was much more advanced in the US and also, connected to this, to social history more generally. Nonetheless, he recognizes that early initiatives in the UK did not take long to begin, together with available funding in various areas.

In general, though, the concepts of a basic mainstream acceptance of some digital tools and methodologies seem to be paired in the UK (and equally absent in Italy) with both

a certain dynamism at the institutional level and an awareness – and some demands, if not initiative - on the part of the students. This will be discussed further in the next section, related to education (3.5.2). Both *transferring digital history to education* and *widening participation* are linked to the disciplinary context of digital history in the UK, but they also have specific features and issues that suggest that they should be treated as separate categories, directly related to the core category *developing digital history*. For this reason they are discussed separately.

3.5.2 TRANSFERRING DIGITAL HISTORY TO EDUCATION

The main difference overall between the UK and the Italian case in education is the availability of teaching programmes, especially at postgraduate level, in digital history and even more digital humanities. Actually, UK-A trained in one such course ("I did a Master's degree in 'History and Computing'") as early as 1986 and other interviewees, such as UK-E and UK-F teach in such courses. Also, two participants (UK-G, UK-I) are themselves PhD students in digital history.

Of course, most students of history do not attend these kinds of courses but still may encounter digital history tools and activities in their degrees.

UK-A illustrates the most complete picture of the situation in the UK in this regard.

> *In the last five years, teaching, learning and research has been transformed by web technology. Mostly the reason for that, I think, is because of the widespread digitisation of historical sources and the accessibility of those.*

To explain how technology enters the teaching sphere, she highlights two converging elements: "there is either student demand or the perception from above which imposes the change". Students appreciate any teaching activity that has "added value and anything that is extra" and, because their feedback is important, there is pressure on the

offer side. Also, "because universities want to be seen to be innovative and trying things", often some degree of change is imposed from above.

Nonetheless, interviewees in the UK, even though they use the term "digital natives" more widely than their Italian counterparts, hold a similar view that most students are not "trained" to use the Web and associated technology to study history at university level. As UK-F puts it, "they think they know it all but they have absolutely no clue".

However, none of the interviewees in Italy mentioned any sort of demand or even expectation on the part of the students for technological innovation in academia or any attempt at competition among universities to attract students on this basis.

Also in the UK, as highlighted by UK-A, finding new career paths and increasing employability is one of the key factors in favour of the introduction of more training in digital tools for historians, particularly at graduate level and for PhD students. Typically, the main desired career path for PhD student is the academic career. In this field, UK-G stresses an element that is common with the view held by Italian interviewees, namely that not all PhD students are particularly tempted by innovation and prefer to be "cautious". This means in very similar terms to what was highlighted for Italy that students tend to want to

> *emulate what they think worked for people in the past and they think that if they do exactly the same as their supervisor did, they will end up like their supervisor.*

3.5.3 WIDENING PARTICIPATION

In the realm of the role of historians in society and their communication with the general public and with *amateur* and non-academic historians, more differences appear between the two countries.

First of all, interviewees in the UK do not stress particularly a sense that historians consider themselves an élite in society. UK-J evokes a "degree of reflex snobbery" concerning the work of independent writers or scholars who are "not safely within the university context" but this is counterbalanced by a long tradition of respected independent scholars.

A similarly long tradition exists of historians using the media to communicate their findings to the general public. UK-H recounts how a large and successful digital history project such as the *Old Bailey Online* (launched in 2003) became the source of several "spin-off projects" that involved even larger audiences, such as programmes on TV and radio, as also mentioned by UK-C.

Finally, there is a qualitative difference in how digital historians in Italy and the UK perceive the participatory potential that the Web affords to members of the public, and in particular to *amateur* historians, as well as the significance of this participation for the profession.

In a clearly appreciative tone, UK-J talks about a "dedicated band of independent scholars", coming from a "long tradition […] of producing very, very fine work", whom he can mention by name and by specialty; he also stresses the fact that, in general,

> *the majority of scholars who want to read good historical writing, actually judge the material by the quality it produces than actually, where the person writing comes from.*

Also, UK interviewees (UK-A and UK-E in particular) have pointed to the fact that, due to recent changes in how academic work is evaluated and funded, it has become

increasingly important for scientists in any field to be able to demonstrate how their research "impacts" on society.

In the UK the data shows that this topic is more linked to personal, familiar and local history, to the specific interests of historical associations and cultural clubs and to the public in general, not necessarily seen as a source of interaction with the historian but more as a recipient of direct communication, especially through one way, more traditional, communication channels such as television and radio.

3.5.4 OUTCOME OF THE COMPARISON

This section (3.5) has so far presented a comparison between the theory that emerged from the Italian data and data from interviews with digital historians in the UK. Constant comparison and modifiability are a key property of a grounded theory. Figure 5 below illustrates diagrammatically the elements of this comparison.

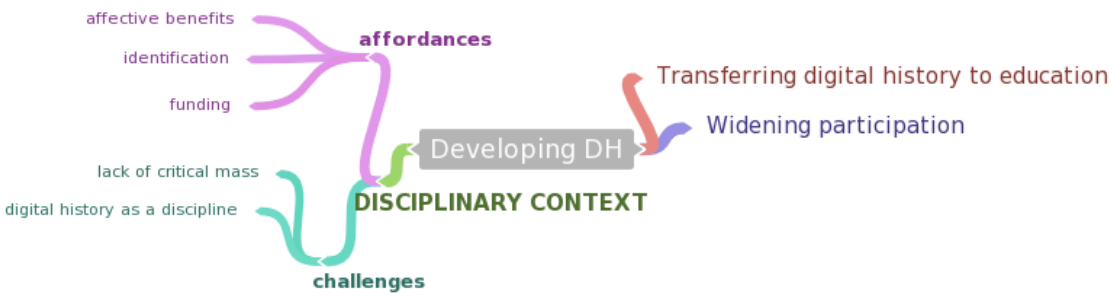

FIGURE 5 - OUTCOME OF THEORY COMPARISON

The comparison indicates that several of the categories that emerged from the Italian data have shown relevance in the UK data, such as *disciplinary context*, *affordances and challenges*, *transferring digital history to education* and *widening participation*, but their connections and positioning towards each other are different. These differences were discussed in detail in the previous sections. In sum, starting from the same core category, *developing digital history*, the availability of a *disciplinary context* for digital historians to research and teach in this capacity produces a subordination of

affordances and *challenges* to this context. What digital historians are able to do and what still challenges them in this field in the UK, contrary to what has emerged from the Italian data, is firmly placed within their professional experience and activities, and therefore challenges such as *marginalisation* and *impermanence*, which have proven significant in the Italian case, are almost completely absent from the concerns of UK digital historians.

In terms of *transferring digital history to education* and *widening participation*, interviewees in the UK show concerns that are not so dissimilar from those presented by Italian interviewees, but again their stronger connection with the disciplines of history and also of digital humanities open a rather different perspective.

The following chapter contains the conclusions, limitations and implications of this study.

4. DISCUSSION, CONCLUSIONS, IMPLICATIONS

4.1 RESEARCH AIMS AND CHOICE OF METHODOLOGY

This study addressed the question:

What does it mean to be a digital historian in Italy and what are the implications for history education?

The purpose was to provide a reflective practitioner perspective for digital historians in Italy. A detailed analysis of this perspective was not previously available in the literature on digital history, and in particular this field has remained largely under-theorized (Thaller, 1989, Booth, 2004, Orlandi, 2007).

Another purpose, therefore, was to conceptualise the issues in a theory and to set the results within the field of education; this was done by trialling the use of classical grounded theory (Glaser, 1998), with its focus on discovery and insight, to investigate digital history. This is a contribution to both the fields of education and history and a perspective would have been difficult to obtain from inquiry conducted in either field separately.

Grounded theory was selected over other qualitative research methodologies (ethnography, phenomenology and action research) because of its focus on theory building, on discovering the main concern of the participants, as expressed by themselves in the data and on applying a rigorous method of data gathering and analysis that grounds the findings firmly in the data themselves. These characteristics are particularly evident in the specific form of grounded theory called classical or Glaserian grounded theory and therefore this constituted the final methodological choice (Glaser, 1998).

In this case, the methodology was applied successfully to identify the Italian historians' main concern, which is to develop digital history in a way that takes advantage of the affordances of technology and addresses the challenges, within the discipline of history, for research and education but also in relation to the potential opportunities for wider engagement and public participation (3.3.1c *Widening participation*), which is an underdeveloped channel for historian's 'passionate engagement'.

The Italian digital historians in this study find that *transferring digital history into education* (3.3.2) is crucial to the development and sustainability of digital history but it also poses challenges, some of which can be addressed within the community of historians, while some others require changes at a more structural, institutional level. The implications of these findings will be discussed in more detail in section 4.2.1 and 4.2.2. Section 4.2 summarises, first of all, the theory that emerged from the Italian data.

4.2 CONTRIBUTION TO THE FIELD

One of the outcomes of the research is a substantive, i.e. area focused, theory of being a digital historian in Italy (Figure 6). The theory is a means to an end, a tool to represent the concepts that have emerged from the study and the connections between them.

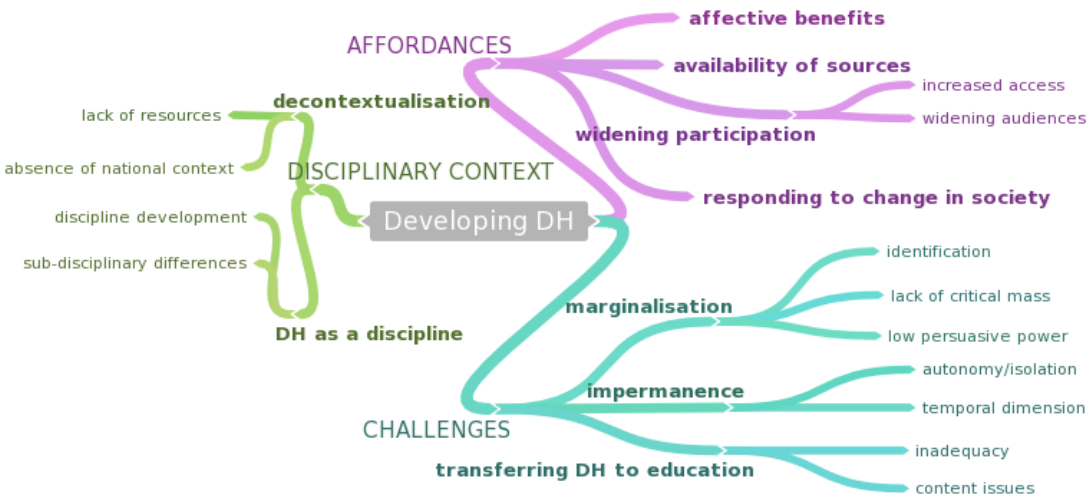

FIGURE 6 - A SUBSTANTIVE THEORY OF BEING A DIGITAL HISTORIAN IN ITALY

The theory that emerged from the data analysis shows that being a digital historian in Italy, in professional practice, means applying digital history in a way that is consistent with the definition of digital history adopted for this study:

> *Digital history is several things: a **methodology** meant to aid the traditional art and practice of historians, the **use of digital tools** to gain insight into information that cannot be done with a legal pad and pen, allows historians to **disseminate** and present their information in new ways, and a means to reach **wide audiences** through digital technologies (Heppler, 2013) [emphasis added]*.

Digital historians in Italy use digital methodologies to aid and integrate their work and digital tools to explore new possibilities, for instance they use sources available online (3.3.1b *Availability of sources*), create digital tools, such as blogs and podcasts, use online publication as an opportunity for *widening participation* (3.3.1c) in historiography, both as a benefit to their own participation in historiography and to open the products of their research and teachings to new and wider audiences.

However, this study also moves beyond this definition of digital history and its applications, by addressing directly, through their own voices, the digital historians' evaluations of their professional practice as well as the context in which it takes place.

It shows that, alongside and beyond the elements of the definition, they work at *responding to change in society* (3.3.1d) by actively exploring the affordances of digital technology in their methodology and considering the challenges posed by the pervasiveness of technology in society and in particular in their own students' life experience.

The theory also makes explicit their ideas and concerns regarding digital history education, which the definition does not highlight, but which have very much to do with the professional experience of the digital historian.

The theory is structured around the core category *developing digital history*, which represents the main concern of the participants and conceptualises how they attempt to resolve it. The nine substantive categories (*affective benefits, availability of sources, widening participation, responding to change in society, marginalisation, impermanence, transferring digital history to education, de-contextualisation* and *digital history as a discipline*) are linked together and to the core category by three theoretical categories, *affordances, challenges* and *disciplinary context.* These theoretical categories are represented in the diagram by the coloured branches that emanate from *developing digital history*.

The conceptualisation of the first four categories (*affective benefits, availability of sources, widening participation, responding to change in society*) as *affordances* for the participants explains not only their motivation and attitude towards digital history, but also how they perceive that digital history can impact and influence their practice. Similarly, the three *challenges* (*marginalisation, impermanence, transferring digital history to education, de-contextualisation*) explain not only the participants' personal doubts and misgivings about some aspects of doing digital history, but also how they evaluate their practice in digital history *vis à vis* their peers and their professional environment. These two elements are rarely found in conceptual form in the literature and never all together in a systematic analytical work; they have, however, significant repercussions on specific aspects of being a historian, such as education, as will be discussed in the next section 4.2.1. Finally, the perspective of the *disciplinary context* is what explains the interviewees' views and experiences on how digital history is and/or

should be related structurally and functionally to historiography and other humanities, including digital humanities. This element is of relevant theoretical value and involves considerations of epistemology as well as discipline level and pragmatic "politics" that are difficult to ignore in the process of doing and developing digital history.

This study also goes beyond the case of Italy by providing an illuminative comparison with data gathered from digital historians in the UK. This comparison has highlighted three categories that are considered crucial by respondents in the UK: *disciplinary context*, *transferring digital history to education* and *widening participation*. More detail on the different aspects is given in the following two sections, 4.2.1 and 4.2.2, where the findings of this study are brought together in key conclusive considerations.

The findings and implications of this study can be organised into two broad categories:

1. Findings and implications for education of future historians and academic development in the area of teaching.
2. Findings and implications for historiography, of particular relevance to historians' attitudes towards and use of digital history.

They will be considered in turn.

4.2.1 FINDINGS FOR EDUCATION

This study presents three key findings in this area for Italy: that affective benefits of doing digital history have a role to play in shaping education, that students of history need to be guided through the affordances of the digital world with a solid historiographical methodology and a critical approach and that postgraduate students interested in digital history and future (digital) historians need opportunities to make a career of or with the digital.

1. Affective benefits of doing digital history have a role to play in shaping education.

Affective benefits are a key element of how digital historians in Italy approach their initiatives and the affordances they see in them (3.3.1a); passion, curiosity and a degree of risk-taking respond to their desire to explore these affordances within but also beyond their professional practice. These attitudes are well in line with the appeals and aspirations found in the literature to make history teaching more attractive and effective for the students of today. Kelly (2013) makes this explicit by saying that "unless we muster the will to reconceptualise the way we teach students about the past, taking into account the new realities of the digital world […] we are in trouble" (p. 127).

The Italian digital historians in this study made specific recourse to these personal attitudes because they were forced, in most cases in the first phase, from the mid-1990s, and in some cases in the second phase, from the mid-2000s (see *temporal dimension* as a property of *marginalisation*, 3.3.2a) to train themselves or collaboratively with like-minded colleagues in the skills necessary to develop digital history projects. The participants see this as a positive stimulus to *autonomy*, but also often negatively compensated by *isolation*; both elements contributed to the *impermanence* (3.3.2b) of the resulting projects, which in itself hinders the creation of structured training for others.

This research advances the field by making these *affective benefits* of pursuing digital history and the effects of lack of training on the digital historians and their projects more explicit than they are in the previous literature and analysing them for their effect on education.

Moreover, the research also shows that concerns are present, both in Italy and the UK, regarding the possible clash between this *pioneering* attitude and the degree of risk-

taking and venturing into the unknown it involves (see 3.2 Identifying the core category) and the tendency to conservatism in the profession (see 3.3.2a *Marginalisation* and 3.3.3a *De-contextualisation* for the Italian case). By contrast, data from the UK case show that passion, interest and curiosity might be difficult to teach but they can certainly be modelled by the digital historians in a favourable environment (3.5.1 *Disciplinary context*).

2. Students of history need to be guided through the affordances of the digital world with a solid historiographical methodology and a critical approach.

The pressures for change coming from technology as well as the relationship the students have with technology outside academia have specific affordances for education. Kelly (2013) clearly identifies the issue by saying that "the historical profession has two choices: change our ideas about what it means for our students to "write" about the past, or fade into irrelevance" (p.80). The abundance of sources and tools available online and the widening participation in historiography, enabling both new access and wider audiences, together constitute an opportunity inextricably linked to its challenges. However, the skills to deal with these sources and tools must be taught by scholars who are able to give effective training in both areas.

This study confirms for Italy two key points of Kelly's (2013) work: on the one hand that the students need guidance on how to study and "make" history with the digital, regardless of how digital their lives outside of university are; on the other hand that the majority of historians are not prepared or trained or possibly both, to take on this guidance role and apply Kelly's powerful recommendations on how to teach history in the digital age. After all, as Kelly (2013) explains "none of us learned how to do this sort of work in graduate school" (p. 125). This is not true for all UK participants, though.

However, this study also goes beyond these points, towards explaining why there are so few digital historians in Italy and what are the practical challenges they face not only when trying to teach history in the digital age themselves, but even more importantly, when they try to build the core tenets of a discipline in a professional environment that creates *impermanence* for their projects and *marginalisation* for them, with consequent *lack of critical mass* and *low persuasive power*. If Kelly (2013) so aptly illustrates what should be done to teach history in the digital age, this study contributes specifics to the explanation as to why this is not happening, at least in the case under consideration, and suggests what may have to be done to remedy it.

Digital historians in Italy are aware of their own advanced position as teachers in and of digital history, but they are also aware of the challenges posed by their *marginalisation* (3.3.2) and the *de-contextualisation* (3.3.3) of digital history within the discipline of history, both of which need to be reversed in order to afford sustainable and meaningful changes in the structured and programmed training of entire classes of undergraduate students. In *transferring digital history to education* (3.3.2) they mention very serious *inadequacy* issues, pertaining to a serious lack of trained personnel and resources to accomplish this training.

These findings are located in the context of more general literature on digital scholarship, developed particularly outside Italy; this work sheds light on some aspects that are connected to the findings presented here, and in particular that there is "tentative take-up" (Weller, 2011, p. 52) of technology among scholars. For instance, with specific reference to Web 2.0, Procter, Williams and Stewart (2010) present a very polarized situation in which, while most scholars do make occasional use of these tools, 39% of them do not use them at all and, even more importantly, their choice is determined by the absence of recognition on the part of their peers of these particular

channels of communication and the associated danger of missing the "career rewards that flow from such recognition" (p.6). Harvey et al. (2010), moreover, found a distinctive bias towards traditional forms of communication and publication on the part of early career scholars ("pre-tenure" in the US context of the study), while more established scholars felt able to "exercise significantly more freedom" (p.9). A recent study of 22 UK academics "with expertise in educational technology" (Scanlon, 2014, p. 12) suggests that the response of academia to the technological changes with the potential to change various aspects of scholarship "is likely to be complex" (p. 21). The findings of these studies and the issues they raise are particularly applicable to the Italian case, as the data analysis above has shown, because they highlight not only that the digital scholars tend to remain a minority, but also that their relationship with the overall academic context is not straightforward and is worth investigating.

The present study also shows that an important role can be played by academic librarians as providers of training, not only for access to online historical sources but also for their role as information sciences specialists (3.3.1b *Availability of online sources*, 3.3.2c *Transferring digital history to education*). This represents a step towards considering what Boonstra et al. (2004) called "historical information science" (p.4) as an integration between the fields of information science and history.

The key difference in this respect between Italy and UK is in the demand made by students and academic institutions on the historians to address the digital affordances (see 3.5.2). This key finding from the UK points to how digital history could be moved forward in Italy, in two different but convergent directions: from "below", i.e. from students' expectations and requirements that the teaching of history become relevant and up to date with their highly digitalised life experience, and from "above", i.e. from

the institutional level, through the provision of resources, rewards and benchmarks for doing and teaching history in the digital age.

3. Postgraduate students interested in digital history and future (digital) historians need opportunities to make a career of or with the digital.

Providing postgraduate students and aspiring historians with specific skills and tools might not be enough to allow them to pursue a career in digital history. A few have the opportunity to train to become digital historians in Italy through a pupil-mentor relationship (as in the case of "second generation" digital historians who have studied with "first generation" digital historians – *temporal dimension* as a property of *marginalisation,* 3.3.2b), but this presents risks because it grounds their academic careers in what is perceived as a niche field within academia and does not gain them comparatively better job prospects outside academia. Formal recognised postgraduate training in digital history would be necessary to counterbalance these factors. While no interviewee was aware of any PhD students in digital history in Italy, two PhD students working in digital history in the UK were interviewed. This shows a significant difference in attitude and opportunities on this front as well.

Moreover, in the UK (section 3.5.2) training in digital history can also rely on the centres and structures of digital humanities, while in Italy, despite calls for debate on this issue (Orlandi, 2007, Roncaglia, 2002), this has not been realised.

Aspiring digital historians today in Italy are in a situation that is not dissimilar from that of their mentors and still face the lack of context, support, strategies and options that might bring the field of digital history forward in a collective, dialogical manner and enable the creation of a community of practice. So, one implication of this research is to point up the support and enabling mechanisms needed for young academic historians to engage with the possibilities offered by digital history.

Inter-disciplinarity, especially with digital humanities, is a key positive element of training in digital history, especially for postgraduate and research students and affords better access to funds, structures and opportunities, as highlighted by participants both in Italy and the UK (see 3.3.3 and 3.5.1). This has specific consequences also for education, where joint programmes (such as the one presented in Ensslin and Slocombe, 2012), although not easy to implement and evaluate, have the benefit of promoting dialogue, as well as employment opportunities, across the various digital humanities specialisations.

4.2.2 FINDINGS FOR HISTORIOGRAPHY

Findings and conclusions more directly related to the disciplinary context of historiography are here highlighted separately for clarity of exposition: nonetheless, they have strong connections with the conclusions reached for education, because the disciplinary context is where both education and research take place.

These findings are: that the professional label/identification as "digital historian" is not indispensable but it is a positive in a supportive environment, that the disciplinary context where digital historians operate is the key element for the development of their activities and their sustainability over time and that digital historians reflect on and often practise their role in society based on the opportunities for widening participation in historiography afforded by digital technologies.

1. The professional label/identification as "digital historian" is not indispensable but it is a positive in a supportive environment.

Digital historian do not have to wait to be able to identify themselves as such before doing digital projects, as was the case for most Italian participants, some of whom even show reluctance to accept it (see *identification* as a property of *marginalisation* 3.3.2a).

However, when they can use the label because the professional environment understands/accepts/supports it, as it is the case with most UK participants (3.5.1 *Disciplinary context*), the evidence suggests that this 'identification' adds to the viability, visibility, impact and durability of their projects. Even though the literature does not present many definitions of the digital historian (see above 1.1.2), this research shows that it is not a question of agreeing on a specific definition of who a digital historian is, but of being able to use the label in a way that fosters one's professional practice. This has implications for education, especially for the training of future historians, on whether they are able to choose digital history as part of their career, as discussed above in 4.2.1 number 3.

2. The disciplinary context where digital historians operate is the key element for the development of their activities and their sustainability over time.

The study shows that digital historians in Italy have a high perception of *marginalisation* (3.3.2a) and they present a situation where their efforts and projects are *de-contextualised* (3.3.3a) and lack disciplinary level support and recognition in the local as well as national context. National projects are absent or incoherent, and while the rhetoric abounds, the real institutional support falters. Accepting that these results are specific, what can be generalised is the need for support mechanisms that would turn the negative aspects of 'digital affordances' into positives.

As a comparison, UK interviewees find themselves in an institutional and scientific framework where their work can be positively and productively located and even effectively advance the field itself (3.5.1).

The essential elements for the development of digital history from the point of view of the digital historians go well beyond the affordances and challenges that impact on them as "experts", but involve the professional context in terms of their relationship

with the "traditional" historians, the possibility and meaning of mainstreaming, the availability and accessibility of support and leadership in academia and their relative persuasive power. Of the perils of digital history mentioned by Cohen and Rosenzweig in the early Web 2.0 era, namely "quality, durability, readability, passivity and inaccessibility" (2006, p.3), this study found that issues of quality and durability of the sources as well as products of digital history are a serious concern for both digital historians in Italy as well as the other historians, for whom the *lack of critical mass* and *low persuasive power* (3.3.2a) of the digital historians as a group often results in a unwillingness to participate in digital history research and teaching.

The issue of the low number of innovators, pioneers, "missionaries" (Floud et al, 2013) within the discipline of history is raised in the data, both in Italy and the UK, and reflects what is said in SoTL literature (Pace, 2007, Booth, 2004), but also specifically by digital history literature, including Kelly (2013) and Minuti (2011). Taking an approach to the discipline that does not fit comfortably within the general disciplinary culture (Booth, 2004), such as a SoTL approach or a digital history approach, results in the number of scholars involved not rising over the critical mass level necessary to influence the discipline for a long time or on a substantial basis, especially with regards to education. In this respect, one important aspect of this study is the implications that, still at the present time, the experimentation and the advances of digital history remain largely confined within the small groups of digital historians and are not able to be translated into general fields, such as education, see above 4.2.1.

If on the one hand the data indicate that digital historians perceive as their responsibility producing the necessary depth and relevance in digital history for it to propagate beyond the small group of "pioneers", it is also on the other hand quite clear from the Italian data, especially from the *challenges* (section 3.3.2), that working

against the current and being forced to remain pioneers for a disproportionately long period of time only weakens the determination of those who attempt to develop digital history and does very little to convince those who do not.

In the UK, the availability and intensity of the debate on teaching history in higher education, with or without digital technologies, is considerably higher: both educational technologists, such as Weller (2011), and historians, such as Kelly (2013) make regular and significant contributions and collections of testimonials and experiences, such as those found in Floud et al. (2013) and even more extensively in Booth (2013) open avenues for debate and even new practices in research and education with technologies.

Having digital history evolve into a distinct discipline might be construed as an overall solution to the lack of funding, structures, dedicated faculty positions and structured teaching programmes. This however has not happened, as highlighted above, in Italy or in the UK. Nor do the digital historians in Italy recommend this path or consider it necessarily feasible or scientifically sound (section 3.3.3 for Italy and 3.5.1 for the UK). Even though the rationale for a discipline is not established, the need for a professional setting and framework is clear.

3. Digital historians reflect on and often practise their role in society based on the opportunities for widening participation in historiography afforded by digital technologies.

Digital historians, both in Italy (3.3.1 *Widening participation*,) and the UK (3.5.3 *Widening participation*), consider themselves open, often more open than other historians, to dissemination and access to historiography from outside academia: this openness, facilitated by Internet and Web technologies, provides historians with an operating environment where scholars can find new professional opportunities and the

non-academic audiences can access the discipline more easily and participate constructively in it.

This has implications for professional practice and for education in particular, because it increases the number and the quality of the opportunities historians have to bring the community in the classroom and the classroom outside the confines of academia. As Parker (2013) proposes, a "new scholarship of classroom-based, open, communal inquiry" (p. 23), based on SoTL literature and expertise, could produce a renewed teaching and learning project centred on the "university classroom as the primary site, and gatekeeper, of disciplined, scholarly knowledge-creation" (p. 24) but open to for the student to become "a practitioner-scholar: in their discipline, with senior academics; in their communities, with interest groups, and in their later, working life" (p. 29). This proposal is in line not only with the suggestions made by the participants in this study that historians must be more open to the community and the amateur historians, but also with the affordances of digital history for historians and the community, in terms, for instance, of *availability of sources* (3.3.1b) and *widening participation* (3.3.1c) in history research and publication. Parker (2013) indicates in digital tools and practices, such as "social referencing sites, e-journals, wiki, blogs" (p. 30), some of the key features of the project for the "new scholarship" she proposes. This element further ties together the SoTL debate and the digital history debate, through the tools of the digital seen not only as opportunities to be exploited but also as new ways of looking at disciplinary advancement.

The findings for education and for the discipline discussed above will be brought together in a final conclusion (4.6), after the limitations of this study and the potential for future research are considered in the following sections 4.4 and 4.5.

4.4 LIMITATIONS OF THE STUDY

This study has two key limitations. The first limitation is that, due to the formulation of the research question and the focus on higher education and therefore on the formal training of historians as a key element in the selection of the participants, not formally trained *amateurs* are not taken into consideration, as explained above in section 2.3.3a and 2.3.3b. This was the consequence of the specific research design and the purpose of analysing the perspective of professional historians, but, as will be highlighted in the next section, even if it lies outside of the scope of this study, the perspective of the *amateurs* would be a valuable topic to pursue.

The second limitation is that, while this study presented a substantive, i.e. area specific, theory of being a digital historian in Italy, enhanced by an illuminative comparative study of digital historians in the UK (3.5), more work needs to be done in two directions: firstly, to develop on the one hand a fully-fledged substantive theory of being a digital historian in the UK and, secondly, a formal theory of being a digital historian that can be taken to apply across substantive areas. This will be useful to scholars, practitioners and policy leaders in education and in history, a source of reflection for the designing and implementation of effective practice that takes into account the perspective of the digital historians.

4.5 POTENTIAL FOR FUTURE RESEARCH

The elements of this study that represent potential starting points for further research are linked to the issues raised in the *Limitations* section (4.4).

Amateurs and the general public

The research could be expanded to include *amateur* historians as participants. Their contribution to historical research and even teaching has a close connection with the

affordance of *widening participation* to historiography (3.3.1c for Italy and 3.5.3 for the UK), which the participants in this study consider as a positive development.

This topic is also connected to the relationship between academia and society, including historical societies and associations and the general public, including the role of historians in society, but also to how society participates in the writing of history and the role of digital technologies in this process. This seems to be an important area for the future of history as a discipline serving the wider community; the participants in this study suggest that the interface between academia and the interested public is a vital and vitalising field that deserves better support and validation.

Further substantive theories and a formal theory

A full study of digital historians in different countries, such as the UK *in primis*, but also for instance the US, where a significant amount of literature and projects on digital history originated, would contribute to the emergence of substantive theories for those areas and also possibly a formal theory. Also non English speaking environments, such as France or Spain, would be worth investigating, especially to gain a better comparative perspective on digital history across continental Europe. As shown in the Literature review and the participants' considerations on the international aspects of digital history, investigation in other countries and other languages would offer a more complete perspective on the role and perspectives of the digital historians.

These areas of inquiry would benefit from an interdisciplinary collaboration of researchers from the fields of history, education and social science research and also from openness to an international comparative perspective.

4.6 CONCLUSION

This thesis makes a significant contribution to the theory and practice of education by providing a conceptual framework that explains the attitudes of digital historians in Italy and their implications for history education. The participants show a proactive stance towards the development of digital history, supported by personal attitudes and interest in the affordances of digital technology; they also highlight the need, and the marked absence in Italy, of a supportive, enabling professional and institutional environment where digital history research but more importantly the education and training of future historians in digital tools and methodologies is not only possible, but also effective and sustainable. This study also shows, by contrast, that where the digital historian, but also the trainee historian, as is the case in the UK, is not marginalised and deprived of a professional role specifically associated with digital history, and has access to funds/resources and incentives/rewards and dialogue is pursued and valued with the adjoining field of digital humanities, then sustainable educational and research frameworks can be planned and built. Training future digital historians, this study shows, is seen by the study's participants not only as a responsibility for today's digital historians, but also an investment that the whole profession can make, and indeed should make, for its future, in academia and outside it, and for the future of the discipline itself.

Moreover, this research illuminates the need to maintain theorisation as a goal of research in the field of digital history, in order to facilitate the conceptualisation of the issues at hand, especially from a comparative point of view.

Finally, this study shows that research at the crossroads of history, education and social science, such as this, is important to interpret the situation from different yet connected

perspectives, which maintain a link to the theory but also a focus on its relationship with professional practice.

ABBATISTA, G., 1999. Ricerca storica e telematica in Italia: un bilancio provvisorio. *Cromohs*, 4, pp.1-31. http://www.cromohs.unifi.it/4_99/abba.html (accessed October 12th, 2013).

ALDIABAT, K. and LE NAVENEC, C., 2011. Clarification of the blurred boundaries between grounded theory and ethnography: differences and similarities. *Turkish Online Journal of Qualitative Inquiry*, 2(3).

ANDERSON, R.D., 2010. United Kingdom in PORCIANI, I. and RAPHAEL, L. (eds) *Atlas of European Historiography. The making of a profession (1800-2005)*. London: Palgrave MacMillan.

ANDERSON, R.D., 2011. British universities past, present and future: convergence and divergence, in COIFFAIT L. (ed.), *Blue skies: new thinking about the future of higher education.* London: Pearson. http://www.pearsonblueskies.com/british-universities-past-present-and-future-convergence-and-divergence/ (accessed July 21st, 2014).

ANVUR - AGENZIA NAZIONALE DI VALUTAZIONE DEL SISTEMA UNIVERSITARIO E DELLA RICERCA, 2014. *Rapporto sullo stato del sistema universitario e della ricerca 2013.*http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013_UNIVERSITA%20e%20RICERCA_sintesi.pdf (accessed August 6th, 2014)

AYERS, E. L., 1993. *The valley of the shadow. Two communities in the American Civil War*. http://valley.lib.virginia.edu/ (accessed September 9th, 2013).

AYERS, E. L., 1999. *The pasts and futures of digital history*. http://www.vcdh.virginia.edu/PastsFutures.html (accessed August 11th, 2013).

AYERS, E.L., 2013. Does digital scholarship have a future? *Educause Review*, July/August 2013, pp.24-34.

BARLOW, J., 2008. The madness of crowds: recent criticisms of Web 2.0, *Interface*, 8(6). http://bcis.pacificu.edu/interface/?p=3519 (accessed May 23th, 2011).

BENNETT, S., MATON, K., KERVIN, L., 2008. The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology*. 39(5). http://onlinelibrary.wiley.com.libezproxy.open.ac.uk/doi/10.1111/j.1467-8535.2007.00793.x/abstract (accessed Nov. 11th, 2012).

BOCCHI, F. and DENLEY, P., 1994. *Storia & multimedia: atti del settimo congresso internazionale - Association for history & computing*. Bologna: Grafis.

BOCCHI, F. and LUGLI, F., 1989. Computer methods used to analyse and reconstruct the Cadastral map of the town of Carpi (1472) in DENLEY P. and HOPKIN D. (eds.), 1987. *History and computing*. Manchester: Manchester University Press.

BOONSTRA, O., BREURE, L., DOORN, P., 2004. Past, present and future of historical information science. *Historical Social Research / Historische Sozialforschung*, 29(2). http://www.dans.knaw.nl/nl/dans_publicaties/pdf/ (accessed June 24th, 2010)

BOOTH, A., 2004. Rethinking the scholarly: developing the scholarship of teaching in history. *Arts and Humanities in Higher Education*, 3(3), pp. 247-266.

BOOTH, A., 2013. Historians on Teaching. http://www.historiansonteaching.tv/ (accessed Jan. 24th, 2014).

BOYER, E.L., 1991. The scholarship of teaching from scholarship reconsidered: Priorities of the professoriate. *College Teaching*, 39(1), pp.11-14.

BOYER, E.L., 1996. From scholarship reconsidered to scholarship assessed. *Quest* (*00336297*), 48(2), pp.129-139.

BOYLE, T. and COOK, J., 2004. Understanding and using technological affordances: a commentary on Conole and Dyke. *ALT-J, Research in Learning Technology*, 12(3), pp.295-299.

BRADLEY, S., and MIGALI, G., 2013. *University Dropouts: An Evaluation of the Effects of a Tuition Fee Reform in the UK.* http://www.sole-jole.org/14228.pdf (accessed August 6th, 2014).

BRECKENRIDGE, J. and JONES, D., 2009. Demystifying theoretical sampling in grounded theory research, *Grounded Theory Review*, 2(8). http://groundedtheoryreview.com/2009/06/30/847 (accessed June 30th, 2013).

BROWNE, J., 2010. Securing a sustainable future for higher education: an independent review of higher education funding and student finance. *Report*. http://dera.ioe.ac.uk/11444/1/10-1208-securing-sustainable-higher-education-browne-report.pdf (accessed July 28th, 2014).

BRYANT, A. and CHARMAZ, K., 2007a. Grounded theory in historical perspective in BRYANT, A. and CHARMAZ, K. (eds.). *The SAGE Handbook of grounded theory*. Newbury Park, CA: Sage.

BRYANT, A. and CHARMAZ, K., 2007b. Introduction: grounded theory research: methods and practices in BRYANT, A. and CHARMAZ, K. (eds.). *The SAGE Handbook of grounded theory*. Newbury Park, CA: Sage.

BURTON, O.V., 2005. American digital history. *Social Science Computer Review*. 23(2), pp. 206-220.

BUTTERFIELD, J., 2009. Using grounded theory and action research to raise attainment in, and enjoyment of, reading. *Educational Psychology in Practice*, 25(4), pp. 315–326.

CALANDRA, B. and LEE, J., 2005. The digital history and pedagogy project: creating an interpretative/pedagogical historical website. *Internet and Higher Education*, 8, pp.323-333.

CANNADINE, D. (ed.), 2002. *What is history now?* Basingstoke: Palgrave.

CARROLL, J.M., 1995. How to avoid designing digital libraries: a scenario-based approach. *Newsletter ACM SIGOIS Bulletin*. 16(2), pp. 5-7.

CATTUNAR, A., GRANDI E., TOMASONI, M., 2013. Nota Introduttiva. *Diacronie. Studi di Storia Contemporanea*, 15, http://www.studistorici.com/2013/10/29/nota-introduttiva-n-15-ottobre-2013/ (accessed October 10th, 2013).

CENSIS - Centro Studi Investimenti Sociali, 2014. *Classifica Università CENSIS 2013/2014* http://www.universando.com/index.php/universita/classifiche-universita/classifiche-2013-2014.html (accessed July 7th, 2014)

CHNM.GMU.EDU, 2013. Roy Rosenzweig Center for History and New Media. http://chnm.gmu.edu/ (accessed August 11th, 2013).

CLARKE, A.E. and FRIESE, C, 2007. Grounded theorizing using situational analysis in BRYANT, A. and CHARMAZ, K. (eds.), *The SAGE Handbook of grounded theory*, Newbury Park, CA: Sage.

COHEN, D. J. and ROSENZWEIG, R., 2006. *Digital History*, Philadelphia: University of Pennsylvania Press.

COHEN, D. J., 2004a. History and the second decade of the Web. *Rethinking History*, 8(2), pp. 293-301.

COHEN, D. J., 2004b. Digital history: The Raw and the Cooked. *Rethinking History*, 8(2), pp. 337-340.

COHEN, D. J., FRISCH, M., GALLAGHER P., MINTZ S., SWORD K., MURRELL TAYLOR A., THOMAS, W. G. III, and TURKEL, W. J., 2008. Interchange: The Promise of Digital History in *The Journal of American History*, 95, pp.452-491. http://www.historycooperative.org/journals/jah/95.2/interchange.html (accessed September 15th, 2010)

CONOLE, G. and DYKE, M., 2004a. Understanding and using technological affordances: a response to Boyle and Cook. *ALT-J, Research in Learning Technology,* 12(3), pp. 301-308.

CONOLE, G. and DYKE, M., 2004b. What are the affordances of information and communication technologies? *ALT-J, Research in Learning Technology*, 12(2), pp.113-124.

CPS – DIPARTIMENTO DI CULTURE, POLITICA E SOCIETÀ, 2013. *Laboratorio Internet per la ricerca storica e tesi di laurea sulle idee politiche*. http://www.didattica-cps.unito.it/do/corsi.pl/Show?_id=f6od;sort=DEFAULT;search=%7bdocente%7d%20%3d~%20%2f%5eebaldini%20%2ev%2e%2fm%20and%20%7burl_avvalenza%7d%20eq%20%27%27%20and%20%7bqq%7d%20ne%20%27ef0d%27;hits=2 (accessed July 7th, 2014).

CRISCIONE, A., 2003. Sopravviverà la storia all'ipertesto? *Memoria e Ricerca*. 12, pp.165-174.

DAVISON, G., 1997. History and Hypertext. *The electronic journal Of Australian and New Zealand history*. http://www.jcu.edu.au/aff/history/articles/davison.htm accessed February 9th, 2014.

DENLEY, P. and HOPKIN, D. (eds.), 1987. *History and computing*. Manchester: Manchester University Press.

DENLEY, P., FOGELVIK, S., HARVEY, C. (eds.), 1989. *History and computing II*. Manchester: Manchester University Press.

DETTI, T., and LAURICELLA, G., 2007. Una storia piatta? Il digitale, Internet e il mestiere di storico. *Contemporanea*, 10(1), pp. 3-24.

DURANTE, R., LABARTINO G., PEROTTI R., 2011. *Academic dynasties: decentralization and familism in the Italian academia.* (No. w17572). National Bureau of Economic Research. http://www.nber.org/papers/w17572 (accessed August 6th, 2014)

EADH – EUROPEAN ASSOCIATION FOR DIGITAL HUMANITIES, 2014. *Digital humanities centres*, http://eadh.org/education/digital-humanities-centres (accessed July 7th, 2014)

ELLIOTT, N. and LAZENBATT, A., 2005. How to recognise a 'quality' grounded theory research study. *Australian Journal of Advanced Nursing*, 22(3), pp. 48-52.

ENSSLIN, A. and SLOCOMBE, W., 2012. Training Humanities Doctoral Students in Collaborative and Digital Multimedia. *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*, 11(1-2), pp.140-15.

ESPOSITO, A., 2013. Neither digital or open. Just researchers: Views on digital/open scholarship practices in an Italian university. *First Monday*. http://firstmonday.org/ojs/index.php/fm/article/view/3881/3404 (accessed November 24th, 2013).

EVANS, C. T. and BROWN, R., 1998. Teaching the History Survey Course using Multimedia Techniques' *Perspectives online*, 36(2). http://www.historians.org/perspectives/issues/1998/9802/ (accessed June 24th, 2008)

FERRIS, S. P. and WILDER, H., 2006. Uses and Potentials of Wikis in the Classroom. *Innovate: Journal of Online Education*, 2(5).

FETTERMAN, D., 2008. Ethnography in GIVEN, L.M. (ed.), *The SAGE encyclopedia of qualitative research methods*, Thousand Oaks: SAGE Publications, Inc., pp. 289-93,

FITCH, N., 1997. History after the Web: teaching with hypermedia. *The History Teacher*, 30(4), pp. 427-441.

FLOUD, R., SHOEMAKER, R., SPAETH, D., 2013. From computers and history to digital history: a retrospective. *Podcast*. https://historyspot.org.uk/podcasts/digital-history/computers-and-history-digital-history-retrospective (accessed Nov. 6th, 2013).

GIBSON, B., 2007. Accommodating Critical Theory, in BRYANT, A. and CHARMAZ, K. (eds.), *The Sage Handbook of grounded theory*, Newbury Park, CA: Sage.

GLASER, B. G., and STRAUSS, A. L., 1967. *The discovery of grounded theory; strategies for qualitative research*. Chicago: Aldine Pub. Co.

GLASER, B.G., 1978. *Theoretical sensitivity: advances in the methodology of grounded theory.* Mill Valley, CA: Sociology Press.

GLASER, B.G., 1996. *Gerund grounded theory: the basic social process dissertation.* Mill Valley, CA: Sociology Press.

GLASER, B.G., 1998. *Doing grounded theory: issues and discussion*. Mill Valley, CA: Sociology Press.

GLASER, B.G., 2002a. Conceptualization: on theory and theorizing using grounded theory. *International Journal of Qualitative Methods*. 1(2), pp. 23-38.

GLASER, B.G., 2002b. Constructivist grounded theory? *Forum: Qualitative Social Research*, 3(3), Art. 12. http://nbn-resolving.de/urn:nbn:de:0114-fqs0203125 (accessed December 13th, 2009).

GLASER, B.G., 2007. Doing formal theory in BRYANT, A. and CHARMAZ, K. (eds.), *The Sage Handbook of grounded theory*, Newbury Park, CA: Sage.

GLASER, B.G., 2010. The future of grounded theory. *The grounded theory Review*. 9(2), pp. 1-14.

GOULDING, C., 1999. Grounded theory: some reflections on paradigm, procedures and misconceptions. *Working paper series*. University of Wolverhampton Business School, Management Research Centre.

GOULDING, C., 2005. Grounded theory, ethnography and phenomenology. *European Journal of Marketing*, 39(3/4), pp.294-308.

GRANDI, E., RUIZ, E., 2012. Nota introduttiva. *Diacronie, Studi di Storia Contemporanea*, 10. http://www.studistorici.com/2012/06/29/nota-introduttiva-n-10-giugno-2012/ (accessed February 17th, 2014).

GRIFFITH, R., 2000. 'Un-tangling the web of Cold War studies; or, how one historian stopped worrying and learned to love the Internet. *Journal for Multimedia History*. 3. http://www.albany.edu/jmmh/ (accessed June 24th, 2008).

GUTHRIE, W., 2009. Glaserian grounded theoretical approaches to data analysis. *Proceedings of the Association of Researchers in Construction Management* (ARCOM) Doctoral Workshop.

HALLBERG, L. R., 2006. The "core category" of grounded theory: making constant comparisons. *International journal of qualitative studies on health and well-being*, 1(3), pp. 141-148.

HARVEY, D., KRZYS ACORD, S., EARL-NOVELL, S., LAWRENCE S., JUDSON KING, C., 2010. *Assessing the future landscape of scholarly communication: an exploration of faculty values and needs in seven disciplines*. Berkeley, CA: Center for studies in higher education. http://escholarship.org/uc/cshe_fsc (accessed July 22nd, 2014)

HEATH, H. and COWLEY, S., 2004. Developing a grounded theory approach: a comparison of Glaser and Strauss. *International Journal of Nursing Studies*, 41, pp. 141-150.

HEPPLER, J., 2013. Defining digital humanities. http://jasonheppler.org/2013/01/08/defining-digital-humanities.html (accessed August 11, 2013).

HEPPLER, J., 2014. What Is Digital Humanities? http://whatisdigitalhumanities.com/ (accessed January 20th, 2014).

HERNANDEZ, C.A., 2009. Theoretical Coding in Grounded Theory Methodology. *Grounded Theory Review*. 8(3). http://groundedtheoryreview.com/2009/11/30/theoretical-coding-in-grounded-theory-methodology/ (accessed November 30th, 2013).

HESA - HIGHER EDUCATION STATISTICS AGENCY, 2014. *Headline statistics*. https://www.hesa.ac.uk/ (accessed July 21st, 2014).

HICKS, D., 2011. Performance-based university research funding systems. *Research policy*. 41(2), pp. 251–261.

HOCKEY, S., 2004. The history of humanities computing in SCHREIBMAN S., SIEMENS R., UNSWORTH J. (eds.) *A Companion to Digital Humanities*. Oxford: Blackwell. http://www.digitalhumanities.org/companion/ (accessed November 6th, 2013).

Ibm.com, 2013. Developer works interviews: Tim Berners-Lee. *Podcast*. http://www.ibm.com/developerworks/podcast/dwi/cm-int082206txt.html (accessed December 13th, 2013).

ISTAT - ISTITUTO NAZIONALE DI STATISTICA, 2011. *Serie Storiche, Istruzione, Universita, accademie, conservatori. Tavole di dati.* http://seriestoriche.istat.it/index.php?id=7&user_100ind_pi1%5Bid_pagina%5D=12&cHash=60f20a3d90be34dc9471eb030da8a6f2 (accessed August 6th, 2014)

ITZCOVICH, O., 1989. Masters and apprentices in Genoese society 1450-1535 in DENLEY P., FOGELVIK S., HARVEY C. (eds.), 1989. *History and computing II*. Manchester: Manchester University Press.

ITZCOVICH, O., 1993. *L'uso del calcolatore in storiografia*, Milano, Franco Angeli.

JONES, C. and SHAO B., 2011. *The net generations and digital natives: implications for Higher Education*, Milton Keynes: The Open University.

KEEN, A., 2013. The paradox of theoretical sampling. http://www.rcn.org.uk/__data/assets/pdf_file/0015/512115/2013_RCN_research_4.7.2.pdf (accessed June 30th, 2013)

KELLE, U., 2007. The development of categories: different approaches in Grounded Theory in BRYANT, A. and CHARMAZ, K. (eds.), *The SAGE Handbook of grounded theory*, Newbury Park, CA: Sage.

KELLY, T., 2013. *Teaching history in the digital age*. Ann Arbor: University of Michigan Press.

KIM, J-M., 2012. Understanding the lived experience of a Sioux Indian male adolescent: Toward the pedagogy of hermeneutical phenomenology in education. *Educational Philosophy and Theory*, 44(6), pp. 630-648.

KLEINROCK, L., 2008. The history of the Internet and its flexible future. *Wireless Communications*, IEEE , 15(1), pp.8-18.

LARRIVEE, B., 2000. Transforming Teaching Practice: Becoming the critically reflective teacher. *Reflective Practice: International and Multidisciplinary Perspectives*, 1(3), pp. 293-307.

LIU, A., 2012. The state of the digital humanities: A report and a critique. *Arts and Humanities in Higher Education*. 11, pp. 8-41.

MARTIN, S., 2010. The Marriage of Technology and History. *Journal of the association of history and computing*, 13(1), p. I. http://hdl.handle.net/2027/spo.3310410.0013.101 (accessed September 15th, 2010).

MAWDSLEY, E. et al., 1990. *History and Computing III, Historians, Computers and Data*, Manchester: Manchester University Press.

MAYHEW, K., DEER, C. and DUA, M., 2004. The move to mass higher education in the UK: many questions and some answers. *Oxford Review of Education*, 30(1), pp. 66-82.

MINUTI, R., 2001. Internet e il mestiere di storico. Riflessioni sulle incertezze di una mutazione. *Cromohs*. 6, pp.1-75. http://www.cromohs.unifi.it/6_2001/rminuti.html (accessed November 13th, 2013).

MINUTI, R., 2011. Insegnare al tempo del Web 2.0. Considerazioni su esperienze e problemi aperti. In: GENET J.P. and ZORZI A., 2011. *Les historiens et l'informatique : un métier à réinventer*, pp. 109-123, Roma: Ecole Française de Rome

MIUR MINISTERO ISTRUZIONE, UNIVERSITÀ E RICERCA, 2000. *D.M. 4/10/2000 - Settori scienfitico-disciplinari. G.U. n. 249 (24 ottobre 2000).* http://hubmiur.pubblica.istruzione.it/alfresco/d/d/workspace/SpacesStore/28206ac9-fcae-4be5-a716-d3595dadd913/Elenco_Settori_Scientifico_Disciplinari.pdf (accessed January 31st, 2014).

MIUR MINISTERO ISTRUZIONE, UNIVERSITÀ E RICERCA, 2007. *D.M. 16/3/2007 - Determinazione delle classi di laurea magistrale*. http://attiministeriali.miur.it/media/155598/dmcdl_magistrale.pdf (accessed January 31st, 2014).

MIUR MINISTERO ISTRUZIONE, UNIVERSITÀ E RICERCA, 2014. *Iscritti all'anno accademico 2012-2013*. http://statistica.miur.it/scripts/IU/vIU1.asp (accessed July 21st, 2014).

MUNSLOW, A., 2001. What history is. *History in focus*, http://www.history.ac.uk/ihr/Focus/Whatishistory/munslow6.html (accessed February 15th, 2011).

NIX, E., 2010. Wikipedia: how it works and how it can work for you. *The History Teacher*, 43(2), pp.259-264.

NOIRET, S., 2008. Informatica, storia e storiografia: la storia si fa digitale. *Memoria e Ricerca*, 28, pp. 189-201.

NOIRET, S., 2011. Storia digitale: quali sono le risorse di rete usate dagli storici? http://www.academia.edu/1096776/Storia_Digitale_quali_sono_le_risorse_di_rete_usate_dagli_storici_ (accessed November 5th, 2013).

O'REILLY, T. and BATTELLE, J., 2009. Web squared: Web 2.0 five years on. http://assets.en.oreilly.com/1/event/28/Web2009_Websquared-whitepaper.pdf (accessed February 17th, 2014).

O'REILLY, T., 2004. *The architecture of participation*. http://oreilly.com/pub/a/oreilly/tim/articles/architecture_of_participation.html (accessed February 17th, 2014).

O'REILLY, T., 2005. *Not 2.0?* http://radar.oreilly.com/2005/08/not-20.html (accessed February 17th, 2014).

ORLANDI, T., 1992. *Informatica Umanistica*. Roma: La Nuova Italia Scientifica.

ORLANDI, T., 2007. Un ultimo bilancio dell'informatica umanistica. *Atti del Convegno E-laborare il sapere nell'era digitale, Montevarchi 22-23 novembre.* http://rmcisadu.let.uniroma1.it/~orlandi/pubbli/informatica/montevarchi.pdf (accessed August 11th, 2013).

PACE, D., 2007. The Internationalization of history teaching through the scholarship of teaching and learning. *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*. 6(3), pp. 329-335.

PARKER, J., 2013. A new scholarship of classroom-based, open, communal inquiry. *Teaching & Learning Inquiry:The ISSOTL Journal*, 1(1), pp. 23–33.

PAROLIN, L., 2002. Come cambia il concetto di "autorità accademica" con la rete. *Memoria e Ricerca*, 9, p. 169-173.

PEROTTI, R., 2002. *The Italian University System: Rules vs. Incentives*. Paper presented at the first conference on Monitoring Italy, ISAE, Rome. http://didattica.unibocconi.it/mypage/upload/49621_20090119_043419_UNIVERSITA_6_4-02.PDF (accessed July 20th, 2014).

POMERANTZ, L., 2001. Bridging the digital divide: reflections on teaching and learning in the digital age. *The History Teacher*, 34(4), pp. 509-522.

PORCIANI, I. and MORETTI, M., 2010. Italy in PORCIANI, I. and RAPHAEL, L. (eds) *Atlas of European Historiography. The making of a profession (1800-2005)*, London: Palgrave MacMillan.

POYNTZ, N., 2010. History blogs, July 8, 2010 - 18:08, http://www.historytoday.com/blog/history-tomorrow/nick-poyntz/history-blogs (accessed October 1st, 2010).

PRENSKY, M., 2001. Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), pp.1 – 6.

PRESS FORWARD, 2014, *Discover, Curate, and Distribute Scholarship the Web Way*, http://pressforward.org/ (accessed July 7th, 2014).

PROCTER, R., WILLIAMS R., and STEWART J., 2010. If you build it, will they come? How researchers perceive and use Web 2.0. *Research information network*. http://www.rin.ac.uk/our-work/communicating-and-disseminating-research/use-and-relevance-web-20-researchers (accessed July 22nd, 2014).

REASON, P., and BRADBURY, H. (eds.), 2008. *Handbook of action research: Participative inquiry and practice*, London: Sage.

REIMER, T., 2007. Ian Anderson – Association for History and Computing. *Arts-humanities.net: Digital Humanities and Arts*. http://www.arts-

humanities.net/forumtopic/ian_anderson_association_history_computing (accessed October 4th, 2010).

ROBERTSON, S., 2006. What's wrong with online readings? Text, hypertext, and the history Web. *The History Teacher*, 39(4), pp. 441-454.

ROBSON, C., 2003. *Real world research: a resource for social scientists and practitioner-researchers*, Oxford: Blackwell Publishers.

ROMANO S., 1981. Le "Annales" e l'Italia, storia di metodi e storia di "attori". *Mélanges de l'Ecole française de Rome. Moyen-Age, Temps modernes*. 93(1), pp. 457-463.

ROMMEL-RUIZ, B., 2006. Re-imaging and re-imagining history: African-American history in hypertext. *Rethinking history*. 10(3), pp. 451-470.

RONCAGLIA, G., 2002. Informatica umanistica: le ragioni di una disciplina. http://www.merzWeb.com/testi/saggi/informatica_umanistica.htm (accessed February 27th, 2011).

ROSENZWEIG, R., 2003. Scarcity or abundance? Preserving the past in a digital era. *American Historical Review*. 108(3), pp. 735-762.

ROSENZWEIG, R., 2006. Can history be open source? Wikipedia and the future of the past. *Journal of American History*. 22(1), pp. 117-146.

ROWLAND, R., 1991. L'informatica e il mestiere dello storico. *Quaderni Storici*, 26(78), pp. 693-720.

RUBELE, R., 2012. Appunti per una storia dell'ANVUR. *ROARS Return on academic research*, March 8, 2012. http://www.roars.it/online/appunti-per-una-storia-dellanvur-i (accessed August 6th, 2014).

SALVATORI, E., 2009. Hardcore history: ovvero la storia in podcast. Analisi del podcasting dedicato ad argomenti storici in lingua inglese, francese, italiana e spagnola. *Memoria e Ricerca*, 30(1), pp. 171-187.

SCANLON, E., 2014. Scholarship in the digital age: open educational resources, publication and public engagement. *British Journal of Educational Technology*, 45(1), pp.12-23.

SCHREIBMAN, S., SIEMENS, R., UNSWORTH, J. (eds.), 2004. *A Companion to Digital Humanities.* Oxford: Blackwell.

SMITH, C., 1998. Can You Do Serious History on the Web? *Perspectives online*, 36(2). http://www.historians.org/perspectives/issues/1998/9802/ (accessed June 24th, 2008).

SOLDANI, S. and TOMASSINI, L. (eds), 1996. *Storia & Computer. Alla ricerca del passato con l'informatica,* Milano: Mondadori.

SOMEKH, B., 2008. Action research in Given, L.M. (ed.), *The SAGE encyclopaedia of qualitative research methods*, Thousand Oaks, CA: SAGE, pp. 5-8. http://dx.doi.org.libezproxy.open.ac.uk/10.4135/9781412963909.n150 (accessed October 8th, 2013).

STALEY, D., 1998. From writing to associative assemblages. History in an electronic culture', in Trinkle, D. A. (ed.) *Writing, teaching, and researching history in the electronic age historians and computers*. Armonk, N.Y.: M.E. Sharpe.

STARKS, H. and TRINIDAD, S.B., 2007. Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qualitative Health Research*, 17(10), pp.1372-1380.

STONE, L., 1979. The revival of narrative: reflections on a new old history. *Past & Present*, 85, pp. 3-24.

STRAUSS, A., and CORBIN, J., 2008. *Basics of qualitative research: Techniques and Procedures for Developing grounded theory*. Thousand Oaks, CA: Sage.

SVENSSON, P., 2009. Humanities Computing as Digital Humanities. *Digital Humanities Quarterly*, 3(3). http://digitalhumanities.org/dhq/vol/3/3/000065/000065.html (accessed November 20th, 2009).

TERAM, E., SCHACHTER, C.L. and STALKER, C.A., 2005. The Case for Integrating Grounded Theory and Participatory Action Research: Empowering Clients to Inform Professional Practice. *Qualitative Health Research,* 15(8), pp. 1129-1140.

TERRAS, M., 2006. Disciplined: using educational studies to analyse 'Humanities Computing'. *Literary and Linguistic Computing*, 21(2), pp. 229-246.

TERRAS, M., NYHAN, L., VANHOUTTE, E., 2013. *Defining Digital Humanities*, Ashgate: London.

THOMAS, W.G. III and AYERS, E., 2004. The differences slavery made: a close analysis of two American communities. http://www.vcdh.virginia.edu/AHR/ (accessed June 24th, 2008).

THOMAS, W.G. III, 2004. Computing and Historical Imagination in SCHREIBMAN S., SIEMENS R., UNSWORTH J. (eds.) *A Companion to Digital Humanities*, Oxford: Blackwell. http://www.digitalhumanities.org/companion/ (accessed November 13th, 2010).

THOMPSON, J., and BEKHRADNIA, B., 2011. *Higher Education: Students at the Heart of the System": an analysis of the Higher Education White Paper*. London: Higher Education Policy Institute. http://www.hepi.ac.uk/wp-content/uploads/2014/02/White_paper_response_08_15c.pdf (accessed July 24th, 2014).

TIMMERMANS, S. and TAVORY, I., 2007. Advancing ethnographic research through grounded theory practice in BRYANT, A. and CHARMAZ, K. (eds.), *The Sage Handbook of grounded theory*, Newbury Park, CA: Sage.

TOWNSEND, R., 2010. Assimilation of New Media into History Teaching: Some Snapshots from the Edge. *Perspectives*, 48(9), pp. 24–26.

TRINKLE, D., 1999. Computers and the Practice of History: Where Are We? Where Are We Headed? *Perspectives online*, 37(2). http://www.historians.org/perspectives/issues/1999/9902/9902 (accessed June 24th, 2008).

TRINKLE, D., and MERRIMAN, S. A., 2001. *History.edu: essays on teaching with technology*. Armonk, N.Y.: M.E. Sharpe.

TROVATI, G., 2013. Tasse universitarie, in 10 anni crescita del 63%. *Il Sole 24 Ore*, 4 November 2013, http://www.ilsole24ore.com/art/notizie/2013-11-04/tasse-universitarie-10-anni-crescita-63percento-112356.shtml?uuid=ABzmnJb (accessed July 20th, 2014).

UNIVERSITÀ DI PISA, 2013. *Informatica umanistica - Corso di Laurea Magistrale.* http://www.unipi.it/index.php/lauree/corso/10543 (*accessed July 7th, 2014).*

UNIVERSITÀ DI BOLOGNA, 2013. *Master in comunicazione storica*, http://www.unibo.it/it/didattica/master/2013-2014/comunicazione_storica *(accessed February 24th, 2014).*

VESS, D.L., 2004. History in the digital age: a study of the impact of interactive resources on student learning. *The History Teacher*, 37(3), pp. 385-399.

VESS, D.L., 2005. Asynchronous discussion and communication patterns in online and hybrid history courses. *Communication Education*, 54(4), pp. 355-364.

WEINSTEIN, B., 2007. Doing history in the digital age. *Perspectives online*, 45(5). http://www.historians.org/perspectives/issues/2007/0705/ (accessed June 24th, 2008).

WELLER, M., 2011. *The digital scholar: how technology is transforming scholarly practice*. London: Bloomsbury.

WELSCH, E. K., 1994. The wired historian: Internet prospects and problems. *Centennial Review*, 38(3), pp. 479-502.

WIKIPEDIA, 2014a. *Digital History*, http://en.wikipedia.org/wiki/Digital_history#Digital_history_centers (accessed July 7th, 2014).

WIKIPEDIA, 2014b. *Affordance*. http://it.wikipedia.org/wiki/Affordance (accessed July 7th, 2014).

WYNESS, G., 2010. Policy changes in UK higher education funding, 1963-2009. *Department of quantitative social science, Institute of Education, University of London, DoQSS Working Paper No. 10-15.* http://repec.ioe.ac.uk/REPEc/pdf/qsswp1015.pdf (accessed August 6th, 2014).

YEAGER, E, and MORRIS, J., 1995. History and Computers: The Views from Selected Social Studies Journals. *Social Studies*, 86(6), pp. 277-282.

ZAAGSMA, G., 2013. *Doing history in the digital age: history as a hybrid practice | the surface appearance of things*. http://gerbenzaagsma.org/blog/16-03-2013/doing-history-digital-age-history-hybrid-practice (accessed March 17th, 2013).

Questionnaire for experts on digital history – IT-AA

On digital history

1. How would you define digital history?

Non credo che esista una storia digitale separata da una storia tradizionale. Più che altro la pratica storica sta ormai diventando sempre più digitale e digitalizzata. Inoltre l'irrompere delle nuove tecnologie nella pratica storica (nel mestiere di storico) da un lato ha dato allo storico nuovi e più potenti strumenti e dall'altro ha aperto nuovi e non facili problemi metodologici. Esiste poi una "storia digitale" nella misura in cui alcuni avvenimenti contemporanei si consumano totalmente o in gran parte sul Web, come sul Web si creano e distruggono fonti primarie (ad esempio i profili di Facebook).

2. Would you say digital history has brought or is bringing changes to the profession of historian? If yes, would you describe these changes as innovation and how do you evaluate this innovation?

E' certamente una innovazione e una di quelle rilevanti; non sempre né necessariamente una "evoluzione". Cambiamenti ne ha portati numerosi e ingenti al punto che non si può a mio parere più insegnare storia senza in qualche modo insegnare anche le questioni metodologiche e le problematiche portate dall'innovazione stessa.

3. Would you say there are aspects of digital history that are innovative while others are not?

Certamente: non è particolarmente innovativo il modo di condivisione del sapere storico, specialmente tra antichisti, medievisti e modernisti. Ancora la forma saggio è largamente dominante sulle altre, a causa della resistenza dell'accademia, del potere delle case editrici e del sistema di valutazione della ricerca. Sono innovativi i sistemi di condivisione di sapere storico o di fonti su piattaforme collaborative (ad es. Flickr),l'uso dei GIS e in genere dei database relazionali, la diversificazione delle fonti di informazione (blog, forum), la "creazione" di fonti esclusivamente digitali, le problematiche relative alla perdita di contesto, la digitalizzazione del patrimonio storiografico, l'emergere di un nuovo genere di "divulgazione esperta" tramite la grafica 3D, i videogiochi, i podcast.

4. How do you evaluate the so called Web 2.0? Does it represent a new phase in the relationship between historians and the Web? If yes, do you think this is the phase when most historians will adopt Web and internet technologies in their work?

Rappresenta una nuova fase nel rapporto generale del pubblico col Web e quindi anche degli storici. Quanto ancora gli storici lo abbiano percepito non saprei. Certamente il progresso si vede più avanzato in ambito anglofono. Più che agli storici accademici (pur presenti) darei in questo ambito un maggiore merito agli studiosi responsabili di istituzioni museali e librarie, capaci (quando lungimiranti e attenti) di sfruttare meglio il Web 2.0 per valorizzare, condividere e incrementare il proprio patrimonio.

5. Would you say a considerable number of historians have been affected in one way or the other by digital history or it has remained confined to a limited number of "experts" and "specialists" such as yourself?

Per ora mi pare di vedere un lento e inconsapevole avvicinamento agli strumenti e ai servizi offerti dalla digital history solo dietro la spinta del bisogno e della comodità. Non vi è un autentico vero interesse per il tema e per le problematiche connesse, se non spesso come sterile critica ai difetti della storia nel Web. Quindi si consulta la pergamena digitalizzata, ma non si conosce nulla della filologia digitale, si scrive al collega una mail ma non si partecipa a un forum sulla medesima questione trattata nella lettera, si scrive un saggio su un monaco/guerriero/console ecc. ma non si aggiorna la relativa pagina di Wikipedia. La digital history è ancora confinata a un ristretto numero di persone, benché il numero si stia allargando.

6. The 2010 Annual Conference of the American Association for History and Computing was going to be called "Digital History Goes Mainstream". Do you think it is time for digital history to go mainstream? How do you think this process would take place?

Si, penso che diventerà il modo tradizionale di fare storia e lo farà a dispetto delle resistenze dell'accademia e delle case editrici. Ne saranno spinta potente: la comodità di recupero delle informazioni, la velocità della comunicazione, i costi minori e anche "la vanità", nel senso che oggi o si è presenti sul Web o non si esiste anche dal punto di vista scientifico.

On being an historian

7. How would you describe your theoretical position as a historian?

Difficile domanda... Sono una storica che guarda principalmente al dato economico-istituzionale senza trascurare ovviamente Il dato culturale. Da questo punto di vista mi sento erede di una tradizione storiografica in parte marxista e in parte crociana.

8. Do you think there is a relationship between the theoretical position of an historian and her/his approach to technology for teaching and learning?

No, non credo. E' più una questione di attitudine e temperamento.

9. What are your specific areas of expertise in the study of history? Do you think they affect your approach to digital history?

Mi occupo di relazioni mediterranee, di evoluzione della società e delle istituzioni nel medioevo. No... non credo che questo abbia influito sul mio approccio alla storia digitale.

10. Do you believe there are any significant differences in the understanding, use and evaluation of digital history by different sub-disciplines within the field of history?

Diciamo che oggi uno storico contemporaneista non può non occuparsi di storia digitale, mentre un medievista potrebbe sopravvivere (male) senza. Ci sono poi aree borderline che, a prescindere dal taglio cronologico, implicano conoscenze e competenze di storia digitale: costruire GIS storico-archeologici ad esempio o modelli in 3D di edifici storici, biblioteche digitali, lemmari e occorrenze di parole/significati nei testi ecc.

11. How and why did you start working with computers in your professional life? How has your involvement with digital history evolved over time?

Fin dagli ultimi anni di università come studentessa (1996-98) quando cominciai a partecipare a corsi opzionali per imparare l'uso del computer. Certamente col tempo il

mio impegno è cresciuto e si è evoluto notevolmente, anche grazie al mio coinvolgimento nel corso di studi di Informatica Umanistica dell'Università di Pisa di cui sono stata per quattro anni vicepresidente. Ora dirigo insieme ad alcune colleghe il Laboratorio di Cultura Digitale.

12. Do you use digital tools and methods more in your research or your teaching?

In egual misura in ambedue i campi.

13. What is your relationship with the computer experts? Have you become one yourself? If so, was it because it made logical and practical sense or because you felt you had no choice?

Non sono diventata esperta di computer anche se certamente mano a mano ho imparato a destreggiarmi sempre meglio, sempre per voglia di imparare e per convinzione che fosse giusto. Quello che cerco di fare (e quello che credo ogni umanista sia tenuto a fare) è di capire meglio possibile la logica che sta dietro uno strumento o un linguaggio. Quando lo si capisce è possibile lavorarci anche senza essere esperti e soprattutto è possibile dialogare in maniera proficua con gli esperti proprio perché si è in grado di usare un linguaggio parzialmente comune.

On digital history as a discipline

14. Do you think the new generations of historians receive any training in digital history?

Non vedo alcuno sforzo del percorso formativo ufficiale in questa direzione, anche se personalmente sono convinta ci debba essere. Il problema tuttavia non è di facile soluzione: quale tipo di competenze informatiche uno storico dovrebbe avere? Indubbiamente se indirizzato verso la ricerca database relazionali e geografici, information retrival, filologia digitale, codifica dei testi... Se invece indirizzato verso l'insegnamento o la divulgazione ad essere utili sono altri strumenti (audio e video digitali, vidoegames, grafica 3d, grafica digitale ecc.). Quindi non è facie costruire un percorso idoneo. Alcune cose di base tuttavia ci dovrebbero essere nei primi anni: inannzitutto l'impostazione della questione (chiamiamolo un corso base di storia digitale), poi la ricerca su opac, il significato e l'uso delle biblioteche digitali, la problematica delle fonti in rete.

Questo problema ce lo poniamo spesso a Informatica Umanistica, dove gli studenti affrontano solo il 50% del percorso formativo in ambito umanistico e sono quindi molto meno preparati in quel settore che i rispettivi colleghi di Lettere, Storia a Beni Culturali. E' meglio una preparazione di base appena sufficiente di informatica e di scienze umane o invece una specializzazione informatica dopo la laurea umanistica? Per ora la prima scelta ha avuto successo, ma siamo perfettamente consapevoli che non si tratta della soluzione ideale.

15. Should they?

Vedi risposta precedente.

16. Do you think there is an actual discipline “digital history”? Is there an epistemic community of digital historians? Do we need either for the present and future of the profession?

Onestamente no, non la vedo come disciplina autonoma, piuttosto come una disciplina "ausiliaria" utile per affrontare consapevolmente questo periodo di passaggio (tra poche decine di anni tutti saranno storici digitali nella misura in cui il lavoro sarà possibile solo padroneggiando gli strumenti e le problematiche del digitale). Vedo in sostanza un insieme di problemi che sono emersi e che devono essere affrontati con coraggio e competenza dagli storici. Di conseguenza si faranno mano a mano strada storici competenti, che daranno agli altri consigli e indicazioni di storia digitale e che sapranno dare questi " consigli e indicazioni" agli storici in erba in percorsi formativi idonei. Non riesco tuttavia a figurarmi un ruolo di storico digitale diverso da quello di storico semplice, specialmente se guardo al futuro.

17. How would you describe the relationship between digital history and the digital humanities? Is digital history a branch of the digital humanities?

Nel senso spiegato prima sì: ossia anche le digital humanities non sono UNA disciplina ma un complesso di questioni emerse dall'irrompere del mondo digitale nella pratica di lavoro degli umanisti. Tali questioni richiedono un dialogo serrato e un linguaggio comune tra umanisti e informatici e l'inevitabile emergere di figure miste di raccordo.

18. Are you familiar with any significant differences in how digital history is viewed and used in various countries? Is there, in your opinion, an international discussion on digital history across countries and languages?

Sono abbonata a due mailing list anglofone e una francofona e recentemente ho fatto da revisore a due saggi scritti in spagnolo sul tema. Da questa ridotta base di conoscenza mi pare che non ci sia un particolare dibattito sulla digital history in sé, proprio perché i suoi contorni sono sfuggenti. Ci sono tuttavia bei dibattiti su aspetti specifici, quali l'edizione digitale delle fonti, gli e-book, gli strumenti di lettura/decifratura dei documenti, il Web 2.0 e così via. Indubbiamente nell'ambito anglofono il dibattito è più avanzato e gli esperimenti più all'avanguardia.

Questionnaire for experts on digital history – IT-BB

On digital history

1. How would you define digital history?

It is a branch of history that is concerned with the use of digital media and tools for historical practice, presentation, analysis, and research.

2. Would you say digital history has brought or is bringing changes to the profession of historian? If yes, would you describe these changes as innovation and how do you evaluate this innovation?

Indeed it is bringing changes mainly in the fields of dissemination, data collecting and analysis, teamwork and teaching. A significant innovative character is also in providing exceptional tools for research. Less significant is the contribution to new interpretation of facts or in defining new interpretative methodologies.

3. Would you say there are aspects of digital history that are innovative while others are not?

Yes.

4. How do you evaluate the so called Web 2.0? Does it represent a new phase in the relationship between historians and the Web? If yes, do you think this is the phase when most historians will adopt Web and internet technologies in their work?

I do believe the Web 2.0 car enhance the social, economic, cultural role of history and historians. Teaching and dissemination of results and findings are greatly supported by social networks and by Web 2.0 technologies. Also teamwork and networking is greatly enhanced by a careful and competent use of those tools.

5. Would you say a considerable number of historians have been affected in one way or the other by digital history or it has remained confined to a limited number of "experts" and "specialists" such as yourself?

It is still a matter of limited experts and specialist. I am not among those.

6. The 2010 Annual Conference of the American Association for History and Computing was going to be called "Digital History Goes Mainstream". Do you think it is time for digital history to go mainstream? How do you think this process would take place?

Mainstream is meaningless. It is a shallow copy of a momentary fashion. Things that the press like. I would say it is rather a fact of changing practices in a changing world. People changes and future historians will be born in a digital culture. They won't think of using the Web, they will simply use the Web.

On being an historian

7. How would you describe your theoretical position as a historian?

A historians of ideas with a strong philological commitment.

8. Do you think there is a relationship between the theoretical position of an historian and her/his approach to technology for teaching and learning?

At present yes. But this will be less relevant in the future.

9. What are your specific areas of expertise in the study of history? Do you think they affect your approach to digital history?

History of political thought and political history. Indeed they do. Making documents available, sharing. Opening up public discussions…

10. Do you believe there are any significant differences in the understanding, use and evaluation of digital history by different sub-disciplines within the field of history?

Different sub-disciplines are trying to find their own path to digital culture. This is a valuable effort as there is no single way of using digital tools for history.

11. How and why did you start working with computers in your professional life? How has your involvement with digital history evolved over time?

Since I was a university student I have used computers as a "professional" tools. I still do it, from his point of view my involvement has never changed. Tools are changed, thus the opportunities given me by those tools. This is a continuous "research". Using the tools at their best to do my job at the best.

12. Do you use digital tools and methods more in your research or your teaching?

Both.

13. What is your relationship with the computer experts? Have you become one yourself? If so, was it because it made logical and practical sense or because you felt you had no choice?

Friendly. I am not a computer expert; beside, there is no need to become a computer expert.

On digital history as a discipline

14. Do you think the new generations of historians receive any training in digital history?

Certainly not in my country (Italy): there are very few chances of getting in touch with "digital history".

15. Should they?

Indeed

16. Do you think there is an actual discipline "digital history"? Is there an epistemic community of digital historians? Do we need either for the present and future of the profession?

I am not sure. I don't think digital history is a discipline. It's a practice, a techné.

17. How would you describe the relationship between digital history and the digital humanities? Is digital history a branch of the digital humanities?

Is history a branch of humanities? Indeed it is. The same is with digital history.

18. Are you familiar with any significant differences in how digital history is viewed and used in various countries? Is there, in your opinion, an international discussion on digital history across countries and languages?

No to my knowledge. But I am from a very conservative country…

Email interview for IT-CC

Cosa rappresenta, a suo giudizio, vera innovazione nel rapporto tra storia e internet?

Personalmente ritengo che l'innovazione più grande sia la divulgazione svincolata dai costi (redazionali, di stampa ecc.) che gravano su una tradizionale rivista cartacea. Ciò ha comportato, di conseguenza, una seconda novità: il venir meno di un rapporto diretto con enti accademici o istituzioni, che se da un lato potevano farsi garanti della qualità del prodotto, dall'altro avrebbero posto anche molti limiti al suo sviluppo. In questo senso, *Storia in Network* è una rivista nata senza "padrini", referenti o editori. Un limite, secondo alcuni, ma una grande opportunità secondo noi, perché consente di attingere alla competenza di studiosi, giornalisti o semplici appassionati al di fuori degli equilibri e dei meccanismi che regolano la vita di una tradizionale rivista. Non avendo un editore, infatti, non c'è l'esigenza di rispettare alcuna linea se non quella dettata dalla pluralità dei punti di vista, dalla capacitò divulgativa degli autori e dall'attendibilità dei contenuti.

Esistono poi innovazioni pratiche:

- l’opportunità di correggere refusi o errori (spesso su segnalazione degli stessi lettori), non solo sul numero on line ma anche su quelli in archivio, offrendo di fatto contenuti talvolta più attendibili rispetto a una documentazione a stampa;

- la disponibilità di un archivio completo sempre consultabile;

- la possibilità di conteggiare gli accessi ai singoli articoli per valutarne, di conseguenza, il gradimento tra i lettori.

Naturalmente, io mi pongo dal punto di vista pratico del direttore di una rivista di storia. E mi rendo conto che le potenzialità offerte da internet sarebbero praticamente infinite: segnalare appuntamenti, mostre e manifestazioni, informare sull’istituzione di nuovi corsi di laurea, aggiornare i lettori sulle migliori trasmissioni televisive a carattere storico, fornire uno screening aggiornato e completo sulle principali novità editoriali (stampa e video). Ma ciò esula dalla nostre modeste forze: tanto più che spesso l’onnicomprensività è nemica della qualità e dell’immediatezza di lettura. Nel *mare magnum* di internet ormai non è più questione di “offerta” ma piuttosto di scremarne la sovrabbondanza di materiali.

Volendo fare divulgazione abbiamo quindi optato per un approccio *easy*, con una navigazione molto lineare e uno stile di scrittura giornalistico. Per il taglio della nostra rivista la semplicità ci è parsa l’arma vincente.

Quali sono gli ostacoli o le principali difficolta' che lei vede nell'evoluzione del rapporto tra storia e internet?

Non ne vedo. Fatta forse eccezione per l’attendibilità della ricerca storica. Ma ciascuna rivista deve farsi garante del proprio prodotto, rimettendosi poi al giudizio dei lettori. Piuttosto, bisognerebbe mettere a disposizione degli studiosi un maggior numero di fonti on line. L’accesso alle fonti primarie, cioè ai documenti di archivio, è fondamentale per la ricerca. In Italia, purtroppo, la digitalizzazione dei grandi archivi istituzionali (Camera, Senato, Commissione stragi, tanto per fare qualche esempio) procede a rilento. Deficienza tecnologica e difficoltà burocratiche sono tra le cause. Alle quali va sommato il retaggio di un’antica mentalità, che vuole gli archivi come patrimonio esclusivo di specialisti e addetti ai lavori. Un approccio “sacrale” alla storia che l’avvento di internet ha permesso, in parte, di ridimensionare.

Email interview for IT-DD

Quali sono le tue caratteristiche personali e professionali in quanto storico?

Il piano personale e quello professionale si intrecciano. Occorrono certe predisposizioni per dedicarsi alla storia, senza le quali la passione per la storia non può neppure nascere. Il prerequisito indispensabile è la curiosità. Poi con lo studio e la perseveranza si deliniano tutte le altre caratterisitche utili al mestiere di storico: attenzione ai dettagli, spirito critico, passione per l’analisi dei documenti, autonomia di giudizio, versatilità, capacità di comprendere il linguaggio dell’ideologia senza tuttavia confonderlo con la realtà dei fatti.

Conosci altre persone che pensi davvero del loro ruolo una definizione simile alla tua?

Gli storici, compreso chi scrive, sono spesso degli individualisti che rifuggono le definizioni troppo larghe ed ancor più quelle onnicomprensive. Tale genere di definizioni affascina sociologi e politologi, molto raramente gli storici. In ogni caso credo sia impossibile sostenere di poter coltivare gli studi storici senza le possedere le caratterisitiche che ho elencato nella prima domanda. Controverso è invece il rapporto dello storico con le ideologie. Per gli storici di matrice marxista, a cui di certo non appartengo, distinguere l'ideologia dai fatti è non solo impossibile ma neppure auspicabile.

Come usi il computer e internet nel tuo lavoro di storico? Come sarebbe diverso quello che fai se computer e internet non esistessero?

Senza computer e senza internet il mio lavoro sarebbe più lento e più faticoso. Qualsiasi testo storico, a prescindere dallo stile dell'autore, è soggetto a numerose revisioni ed integrazioni nel corso delle ricerche. Senza P.C. ad ogni integrazione seguirebbe una lunga risistemazione del testo. Internet poi, soprattutto negli ultimi anni, consente di accedere rapidamente a fonti secondarie e persino primarie, snellendo notevolmente i tempi di lavoro. Compilare una bibliografia grazie ad internet è una lavoro rapido, a patto di sapere dove cercare. Per ottenere lo stesso risultato in biblioteca occorrono giorni.

Cosa pensi del rapporto tra storici e computer (e internet in particolare)? Qual e' la tua esperienza in questo campo nel lavorare o dialogare con altri storici?

Nel mio ultimo articolo dedicato a Voltaire ho fatto ampio uso di fonti secondarie risalenti all'inizio dell'800 disponibili in rete. Ho inoltre constatato la presenza in rete dell'opera completa di Voltaire, epistolario compreso. Ne sono rimasto paicevolmente sorpreso. Solo dieci anni sarebbe stato impensabile.

Rispetto al dialogo con altri storici non ho avuto particolari esperienze di dialogo in rete in forum o blog dedicati. Da diversi anni però scrivo per una rivista storica on-line, Storia in Network (www.storiain.net), grazie ad essa ho pututo diffondere i miei lavori ed entrare in contatto con altri storici non accademici.

Pensi che ci siano delle differenze in questo campo tra l'Italia e altri paesi?

La mia impressione, ma non ho condotto un'analisi sistematica in proposito, è che sia più facile reperire fonti storiche primarie e secondarie in francese oppure in inglese, piuttosto che in italiano.

Rigaurdo poi all'ambiente accademico italiano il ritardo è certo ed evidente. La lunga esperienza con la facoltà di Scienza Politiche dell'Università di Torino nel campo della didattica a distanza mi ha dimostrato che il corpo docente, salvo rare eccezioni, non ha ancora pienamente compreso le potenzialità didattiche e scientifiche della rete. Ho potuto inoltre verificare personalmente la scarsa disponibilità dell'università ad investire in nuove figure professionali capaci di favorire lo sviluppo della didattica a distanza. Il cambiamento perciò, per quanto inesorabile, sarà molto, molto lento.

Quali aspetti dell'uso di internet (se pensi che ce ne siano) potrebbero essere sfruttatimeglio o ripensati dagli storici per rendere il proprio lavoro di ricerca/insegnamento migliore (qualsiasi significato si voglia attribuire a questa parola).

Internet si sta rivelando estremamente prezioso per la diffusione di studi, ricerche, saggi, articoli di carattere storico e non solo. La stampa tradizionale ha costi di produzione troppo elevati rispetto alla cerchia relativamente ristretta dei lettori. Pertanto il futuro degli studi storici è su Internet e non sulla carta stampata.

Anche nel campo della didattica storica la rete potrà rivelarsi utilissima. Già oggi è possibile creare in rete percorsi didattici molti ricchi attraverso la multimedialità, la comparazione delle fonti, l'ipertestualità. I lavori che pubblico in rete hanno l'ambizione di essere piccoli tasselli di tali percorsi.

Interviewee IT-O

IT-O: Non ho nessun problema con l'anonimato anche perche' sono questioni su cui scrivo faccio conferenze ecc quindi non ho nessun problema che venga fuori il mio nome. si sta parlando di argomenti di lavoro, quindi non c'e nessun problema

Interviewer*: A me interessa la prospettiva degli storici digitali italiani. Qual e' la loro esperienza, come mai si e' avvicinato a questi temi,quali sono gli elementi che ritiene piu' importanti, quali sono gli elementi piu' critici, rispetto alla situazione italiana perche' e' l'ambito su cui mi concentro, poi ovviamente se ha delle riflessioni rispetto ad altri paesi o ai rapporti internazionali in questo campo*

Come e' nato l'avvicinamento alle problematiche del digital della comunicazione telematica per gli studi storici, intanto perche' sono un curioso. mi sono avvicinato molto presto alle questioni nformatiche e digitali ecc e mi e' sembrato anche per il tipo di ricerca che io svolgo che mi ha sempre costretto, costretto molto volentieri per altro, a frequentare biblioteche europee e anche americane, mi e' sempre sembrato straordinariamente potente il mezzo telematico per raggiungere fonti che altrimenti avrebbero richiesto molte spese, soggiorni all'estero ecc. e al tempo stesso anche per il fatto di cogliere facilmente le possibili conseguenze positive di una piu' rapida ma anche piu' libera piu' svincolata da certe forme consolidate tradizionali di ricerca scientifica appunto la possibilita' di disporre di canali di comunicazione scientifica piu paidi, piu' efficienti, meno costosi e meno condizionati da tutta una serie di vincoli che hanno sempre caratterizzato l'editoria accademica tradizionale, soprattutto in termini di costi di produzione. quindi da qui, per questi due motivi si spiega sostanzialmente il progetto che abbiamo avviato nel 1995, quidni all'alba del Web con il mio collega nonche' compagno di infanzia, non solo collega di una vita, [...] dell'universita di firenze, fondando questa prima rivista interamente elettronica e telematica di studi storici, che si chiama cromohs e che esiste tutt'ora ed e' entrata nel suo diciottesimo anno di vita e quindi qualcosa siamo riusciti a combinare, progetto che riguardava appunto da un lato la creazione di una rivista interamente telematica e dall'altro la creazione di una biblioteca digitale e virtuale, le due cose sono distinte, riguardano due aspetti particolari di questo tipo di prodotto, di storiografia moderna. quindi la biblioteca digitale, telematica e virtuale di storiografia moderna, cioe' diciamo dall'inizio dell'eta moderna come la intendiamo in italia, cioe' dall'eta dell'umanesimo fino a quando i vincoli posti dal diritto d'autore vietano la diffusione in rete di testi, la digitalizzazione e la diffusione in rete di testi.

[...] e [...] sono nati cosi', con l'intento di esplorare le opportunita' per la comunicazione e pe rla ricerca quindi attraverso la creazione di un canale di comunicazione sotto forma di rivista e attraverso la creazione di una biblioteca telematica di fonti, di esplorare le possibilita' appunto del digitale per la ricerca. naturalmente questo ha riguardato cosi' in modo privilegiato se vogliamo il tipo di fonti il tipo di interessi, il tipo di materiali sui quali noi, sia io sia [...] che siamo degli storici dell'illuminismo, degli storici delle idee, degli storici della cultura, siamo piu' interessanti, cioe' a dire essenzialmente testi a stampa. non abbiamo particolarmente esplorato altri versanti delle possibili applicazioni telematiche quali per esempio la creazione di database. i dati quantitativi

ippure la creazione di database telematici online come invece e' avvenuto contemporaneamente nei primi anni 90 stava avvenendo anche nell'ambito degli studi storici fuori d'italia.

A noi interessavano soprattutto testi, testi a stampa, testi digitali e creare appunto un canale telematico di comunicazione scientifica che fosse innovativo e che esplorasse le possibilita' della telematica per facilitare, migliorare, ampliare, insomma esplorare le potenzialita' che c'erano in questa tecnologia. dico subito che questi due canali di sperimentazione che abbiamo avviato hanno avuto due sorti molto diverse. per quanto riguarda la rivista, che esiste tutt'ora e funziona, dire che solo ora, alla fine di quasi un ventennio di attivita' stiamo capendo veramente le caratteristiche e le possibilita' o le condizioni operative che sono legate a questa particolare forma di comunicazione scientifica. lo stiamo capendo solo ora, a distanza di tempo. con l'esperienza accumulata in questi anni e lo stiamo capendo in relazione al diffondersi, al radicarsi del movimento dell'open access, con tutte le implicazioni che questo ha anche a livello istituzionale

Per quanto riguarda la biblioteca digitale online la sorte e' stata molto diversa. perche' diciamo abbiamo dovuto riconoscere che si trattava di un vicolo cieco, legato soprattutto naturalmente al fatto di disporre di risorse molto limitate. cioe' in altre parole e' stato abbastanza presto evidente che il futuro delle biblioteche elettroniche erano i grandi database testuali sistematici prodotti o dalle grandi biblioteche o dai grandi soggetti economici di operatori del mondo editoriale e cosi' via. oppure naturalmente anche potenti organizzazioni legate in qualche modo a case editrici o iniziative editoriali p[enso soprattutto al liberty fund che partiti in fondo da un progetto non diverso dal nostro pero' ovviamente hanno raggiunto una solidita' una consistenza e una continuita' di risultati e un livello operativo che evidentemente fa pensare all'esistenza alle spalle di mezzi economici ingenti di cui noi non disponevamo. Questo e' stato un po' l'inizio di tutto quanto. quali sono state le cose che sono emerse subito come aspetti centrali della questione? direi due: la prima e' che abbastanza presto e' diventato chiaro che l'idea che attraverso il mezzo telematico si potessero superare dei vincoli di tipo economico era un'idea non dico peregrina, certamente no, ma era un'idea non del tutto corrispondente al vero. cioe' i vincoli economici erano diversi ma erano certamente ancora molto forti e questo vale sia per la rivista sia a maggior ragione per la biblioteca digitale, la electronic library of historiography. quindi lo sviluppo di questi due progetti e' stato direttamente influenzato dalla disponibiita' di mezzi finanziari che finche' hanno nel modo saltuario che conosciamo, incerto che conosciamo, nel panorama italiano si rendono disponibili, comunque hanno sempre condizionato la scala operativa che potevamo adottare e quindi anche avere magari accelerazioni e battute d'arresto in relazione a questo fatto. e' chiaro pero' che il conseguimento di un assetto operativo ottimale, quale avremmo certamente desiderato, soprattutto per la rivista, non e' stato possibile praticamente mai perche' le necessita' di mezzi finanziari e' comunque molto forte quindi a meno di non attivare un progetto e quindi una richiesta di supporto finanziario specifica per questo progetto, grandi passi in avanti non si sarebbero potuti fare. tenga conto che questa in uno studiolo della scuola normale, chiacchierando noi due, senza avere il minimo supporto di nessuna istituzione e cosi' e' rimasto per lungo tempo. io non ho mai avuto una lira, dal dipartimento, ma solo dai miei fondi di ricerca, dei quali ero titolare e grossomodo lo stesso e' successo per [...].

Ed e' chiaro che avendo anche necessita' di portare avanti progetti di ricerca, quindi presentare richieste di finanziamento alle varie sedi relativi ai nostri temi di lavoro, non ci era possibile presentare dei progetti specifici che avessero la rivista o la biblioteca telematica come oggetto principale. questo per dire che queto problema non e' mai stato risolto e non e' risolto tutto sommato nemmeno ora. o meglio ora la cosa sta cominciando un po' a cambiare perche' il panorama editoriale delle riviste online e' in parte cambiato, non so dire se in meglio o in peggio ma insomma direi che certamente e' cambiato.

Mi concentro sulla rivista anche se [...] e' tutt'ora accessibile e i testi sono disponibili e ci sono molte cose originali che all'epoca assolutamente non si trovavano quindi e' stata anche un'esperienza sicuramente interessante di produzione di oggetti, di fonti disponibili liberamente per la ricerca, pero' e' la rivista che tutto sommato e' stata un po' l'esperienza piu' significativa. poi c'e' un altro aspetto sul quale eventualmente mi soffermo dopo, che riguarda le problematiche della valutazione delle risorse digitali online, ecco perche' poi in realta' questa nostra attivita', questo coinvolgimento nelle discussioni nella sperimentazione col digitale ha riguardato oltre a queste due forme, la creazione di una rivista interamente elettronica a libero accesso e una biblioteca telematica interamente elettronica a libero accesso ha riguardato anche diciamo l'analisi critica del Web. cioe' cercare di contribuire con tutti i mezzi possibili a individuare una metodologia di ricerca e utilizzo delle risorse digitali per gli studi storici naturalmente nel nostro caso che fosse proponibile, che servisse da guida anche e soprattutto fors enon tanto ai nostri collehi, anche ai nostri colleghi per chi e' in grado di inconsapevolezza era vastissimo alla fine degli anni novanta, ma sopratutto agli studenti e quindi da questa esigenza sono scaturite varie attivita;, soprattutto di insegnamento e di intervento attraverso articoli, conferenze, seminari, partecipazioni a iniziative culturali di ampio respiro, come per esempio il salone del libro a torino dove abbiamoa vuto anche un nostro spazio anni fa, ecco abbiamo cercato di esplorare questa strada dell'analisi critica del Web, di come provare a elaborare una metodologia di ricerca e uso consapevole delle risorse digitali per gli studi storici. anche qui naturalmente muovendo tra il vecchio e il nuovo e commettendo anche delle ingenuita', perche' la prima reazione e' stata quella del solito ricercatore pedante che dice, io conosco il problema della metodologia, io sono quello che e' in grado di dire che cosa e' buono e che cosa non e' buono, posseggo gli strumenti per cercare le fonti, devo impiegarle anche per il Web. cosa che si e' dimostrata abbastanza ridicola. lo dico proprio sinceramente, nel senso che ingabbiare il Web per come si e' andato sviluppando in una serie di regole di canali prefissati, criteri di giudizio era largamente al di sotto di quello che il Web era in grado di offrire, delle novita' che era in grado di far venire fuori. forse ha avuto senso nella seconda meta' degli anni novanta lavorare per contribuire allo sviluppo di un senso critico di fronte a quello che il Web offriva perche' quello che all'epoca stava venendo fuori era estremamente variegato, di qualita' molto diversa, da un canale sul quale tutti potevano intervenire quindi questa esigenza di discernere, di selezionare criticamente sembrava particolarmente forte. ma questo tentativo anche di mettere a punto una metodologia di valutazione critica dei materiali sul Web e di creare gli indici di risorse, dei repertori, indicava proprio la sopravvivenza dei vecchi schemi mentali in qualche modo, oggi chi e' che potrebbepensare di costruire sul Web un repertorio di risorse? all'epoca pero' di esperimenti ne sono stati fatti tantissimi. anche molto importanti anche da parte di soggetti molto piu' solidi e

credibili di quanto non fossimo noi e sono falliti tutti. la creazione di indici di risorse selezionate sulla base di questo nostro superiore senso ... non hanno avuto un seguito, quindi oggi ciascuno di fatto parte nelle sue ricerche quasi esclusivamente fidandosi della sua capacita' di cercare nel Web. E naturalmente pero' anche disponendo ormai di strumenti che all'epoca nel panorama del Web non esistevano e che oggi invece sono diventati delle strepitose e incredibili realta' del mondo editoriale e della ricerca scientifica di cui alla fine degli anni novanta di cui pochi alla fine degli anni 90 intravedevano la possibilita', cioe' a dire i grandi aggregatori suprattutto di riviste, le grandi biblioteche telematiche di testi full text ma soprattutto i grandi aggregatori di riviste, con essi si dispone di uno strumento di ricerca straordinario, che ha un picoclo limite pero', cioe' che costa uno sproposito, quindi non e' qualcosa al quale si puo' accedere se non attraverso un canale istituzionale, questo e' evidente. da questo punto di vista la telematica ha avuto secondo me un effetto paradossale, cioe' uno strumento che una enorme potenzialita' di raggiungere chiunque, e di mettere chiunque in grado di fare ricerca, sto parlando - io ho in mente i nostri temi - ma parliamo dell'ambito socio umanistico ma questo e' un discorso abbastanza generale e pero' per la inevitabile nascita di grandi soggetti con operatori commerciali, questa possibilita' di fatto non c'e', anzi la barriera di accesso si e' innalzata enormenmente e i bilanci delle istituzioni, non parlo solo delle universita' ma anche delle biblioteche nazionali sono stati messi prepotentemente sotto stress da questo fenomeno, il che non e' mica una cosa negativa, perche' che siano comparsi sul mercato editoriale dei grandi soggetti capaci di proporre quel tipo di cose e' stata una cosa molto importante innanzituytto perche' ha comunque dischiuso delle possibilita' all'imprenditoria che sono sicuramente apprezzabili e che hanno prodotto strumenti potentissimi che pero' non tutti si possono permettere. questo e' il punto. E in italia biblioteche universitarie e non universitarie che permettono un accesso paragonabile a quello delle biblioteche anglo americane o del mondo anglofono a questi struemtni non ce ne sono. credo neanche la scuola normale, non so l'universita' bocconi, non sono andato a vedere tutte quante, pero' io credo veramente che dopo aver visto i canali di accesso alle risorse elettroniche dell'universita' di oxford, dell'universita' di cambridge, della edimburgh university, della open library delle universita' americane io dubito fortemente che esista una biblioteca italiana in grado col suo budget di garantire querl tipo di accesso. quindi le barriere ahime' si sono innalzate, non si sono affatto abbassate. quale poteva essere l'alternativa a tutto questo? il fatto che potessero esserci dei grandi soggetti pubblici in grado di sopportare loro, di farsi carico loro di progetti di digitalizzazione o di aggregazine e distribuzione di contenuti digitali con dei costi non determinati dal mercato, ma determinate da altre cose o addirittura a accesso libero. Penso ovviamente al modello della BNF oppure anche a tutti quei progetti di digitalizzazione di fonti che sono nati alla library of congress, alla british library ecc oppure anche a grandi iniziative come quelle francesi di presse' che sono iniziative pubbliche, con finanziamenti pubblici che hanno accesso libero e garantiscono quindi degli strumenti potentissimi ai ricercatori. questo non c'e' alcun dubbio, in italia purtroppo inziative di questo genere non ce ne sono state e quindi sono scarsissime le iniziative di ampiezza e importanza paragonabile a quelle che ho appena citato quindi la barriere continua a sussistere, pero' diciamo per tornare al discorso di prima l'idea di poter costruire dal basso una specie di prontuario per l'uso critico del Web e di guida anche alla ricerca delle risorse si e' rivelato proprio una strada senza uscita e sono sostanzialmente tutti falliti e ce ne sono stati tanti di questi tentativ che hanno seguito sia la via della costruzione sia telematica sia a stampa addirittura di

guide all'uso delle risorse storiche, penso alla famosa history highway che comincio' a uscire se non erro la prima edizione nel 2000, io ho anche collaborato a history highway ma era francamente era ridicolo perche' la prima edizione di HH che era coordinata da dennis trinkle che conobbi a oxford proprio alla prima uscita che facemmo per presentare queste attivita', non c'era neanche un sito Web quindi in realta' HH era un libro e gli indirizzi telematic delle ricorse storiche erano da copiare. Da digitare sul browser, poi naturalmente misero un sito Web quindi tutto quanto era molto piu' accessibile. e poi naturalmente invece indici nati per il Web quindi appunto di vario genere come la virtual library o tanti altri che furono concepiti anche nell'ambito di grandi istituzioni come per esempio i servizi digitali, digital humanities di oxford, un grande progetto in questo senso dal quale e' poi nato INTUITE che pero' e' finito. perche' addirttura anche questa idea dei tutoriale ambito disciplinare per ambito disciplinare per guidare lo studente alla ricerca delle risorse telematiche mi pare che non abbia dato dei risultati veramente significativi e che in realta' l'abilita' critica nell'uso delle risorse debba presupporre in cui studia l'acquisizione dei mezzi concettuali della conoscenza critica delle fonti e poi l'avventura diretta del Web e la messa in pratica di queste precedenti consapevolezze critiche acquisite con mezzi tradizionali nell'uso delle risorse. devo anche adire che a distanza di una ventina d'anni dal debutto del Web secondo me il modo col quale gli studenti usano ancora il Web e' largamente insoddisfacente cioe' le risorse di qualita', le risorse importanti, e' largamente insoddisfacente e secondo me, ammesso che abbia senso parlare di digital humanities, devo dire che se uno degli obiettivi delle digital humanities era quello di creare una consapevolezza sul modo di usare ai fini della ricerca e dell'apprendimento le risorse telematiche secondo me per ora i risultati sono scarsissimi. io parlo in questo caso dell'italia perche' lo vedo nell'insegnamento nelle varie universita' italiane dove mi e' capitato non solo di insegnare in modo istituzionale ma anche di fare seminari conferenze su questi argomenti. e' veramente ancora molto scarso non sta assoilutamente alla pari con lo sviluppo effettivo delle risorse disponibili, cioe' e' molto piu' rapido lo sviluppo delle risorse disponibili diquanto non sia la maturazione delle capacita' degli utenti studenti di usarle o anche addirittura dei ricercatori stessi. quindi c'e' un po' uno strano scollamento tra la realta' delle risorse digitali disponibili, con tutte le modalita' del loro sviluppo tutta la varieta' delle forme con le quali si sono sviluppate e la capacita' dei ricercatori e degli studenti di utilizzarle veramente. tale per cui secondo me e' ancora moltissimo la dimestichezza, la propensione, la capacita', la familiarita' del singolo sia studente sia ricercatore a determinare il suo grado di utilizzo delle risorse. e' un processo sostitutivo nei limiti del possibile secondo me non e' avvenuto in forma veramente ampia. se io devo parlare per me io posso dire che per me e' cambiato radicalmente il modo di fare ricerca, ovviamente, ma se devo essere sincero grazie soprattutto a google books. Questo ovviamente ha a che fare con il tipo particolare di interessi che ho io, che hanno persone che studiano temi di storia mondiale, di storia globale, di storia europea in eta' moderna. quindi effettivamente devo dire che la possibilita' di fare ricerca e' cambiata in un modo assolutamente radicale pero' e' cambiato al di fuori di qualsiasi capacita' progettuale o intervento diretto dei ricercatori.

E’ nato grazie all'iniziativa di una grande corporation come google. con la collaborazione delle universita' ecc pero' l'han fatto loro. certo anche le universita' hanno fatto delle cose importanti, continuano a fare e cose che hanno contribuito a

cambiare in modo radicale l'accesso alla letteratura critica, alle fonti, questo non c'e' dubbio pero' e' stato piu' un processo top down che bottom up. perche' la scala operativa per fare delle cose veramente significative con il wbe non e' una scala che permette il bottom up. cioe' ci vogliono degli operatori forti, con grandi risorse e con tutto quello che questo comporta in termini di grandi disponibilita' di capitali, di investimenti pubblici, grandi capacita' progettuali, cose di cui in italia noi difettiamo totalmente, ho paura. penso anche a jstor, organizzazione no profit pero' presuppone una capacita' progettuale e imprenditoriale legata all'accademia, perche' jstor e' nata dall'accademia, e' nata dalle university press americane, come project muse, lo stesso, da noi niente, siamo sempre a scontare un terribile ritardo, pero' per fortuna che ci sono queste cose che hanno fatto cambiare... dove noi potevano fare le cose veramente? ma, sicuramente sul piano delle riviste, diciamo sul piano della scrittura e della comunicazione. sul piano della comunicazione la questione torna alle riviste, cioe' la possibilita' di sfruttare dei canali, di aprire dei canali di comunicazione appunto che offrissero delle opportunita', delle potenzialita' a costi inferiori rispetto a prima e questa e' una possibilita' insomma abbastanza sfruttata perche' le riviste online si sono diffuse si sono abbastanza consolidate, pero' si sta assitendo secondo me a una involuzione su questo piano, sul piano cioe' della parabola delel rivste online. adesso devo dire non ho fatto recentemente indagini a tappeto anche se dovrei perche' dovrei anche scrivere un contributo per un libro ma lo rimando sempre, quindi n non pretendo di avere una panoramica aggiornata della situazione delle rivste online, quelle che nacquero anche quando nacque cromos ecc pero' mi sembra che a giudicare da quanto vedo intorno a noi che si stia assistendo a una certa involuzione e mi spiego. le riviste onlien sono nate per lo piu' come riviste interamente telematiche, riviste per il Web, che cosa vuole dire? un oggetto testuale multimediale accessibile liberamente sul Web e dotato di tutte le caratteristiche dei testi di questo genere, cioe' la plasticita', l'aggiornabilita', la non riconducibilita' alla forma chiusa del fasciolo a stampa del fascicolo tipografico, la pagina tipografica, la periodicita' che caratterizza.. tanto e' vero che cromos non ha una paginazione, non ha una periodicita' se non per nostra comodita' quella annuale, ed e' quindi un contenitore che si aggiorna continuamente. questa e' una rivista sul Web, continuamente. questa e' una rivista su;l Web. pero' le riviste sul Web adesso si stanno trasformando in rivista digitali che e' una cosa ben diverdsa. perche'? perche' e' nata l'esigenza anche per poter conseguire certi vantaggi di visibilita', di distribuzione, di fruizione, di rientrare sotto l'egida di qualche casa editrice. nel nostro caso particolare una casa editrice universitaria che gestisce le riviste. noi comunque prima eravamo ospitati su un server universitario ed eravamo teoricamente pubblicati da una casa editrice universitaria che ci garantiva lo spazio Web e un minimo di assitenza tecnica. ecco pero' l'evoluzione delle case editrice universitarie e' stata tale che anche le riviste attive online come la nostra hanno finito per trovarsi nella necessita' di rientrare nelle piattaforme di gestione dei periodici online messe a punto dalle case editrici universitarie, ma una piattaforma di distribuzione online e' una cosa diversa dalla rivista Web. vuol dire in sostanza che le riviste vengono ricondotte a formato tradizionale, chiuso, che pure puo' essere anche distribuito gratuitamente, puo' anche essere liberamente scaricabile ecc a partire da un formato tipografico, digitale ma chiuso e che e' scaribabile attrvaerso file singoli per lo piu' in pdf. questa cosa ha dei vantaggi sicuramente di piena visibilita' nell'amnbito dei canali di distribuzione delle case editrici ecc pero' lo trovo un passo indietro, paradossalmente una cosa di rivincita della vecchia rivista sulle nuove riviste, privando quella che era una rivista Web nativa di

quella che erano le sue caratteristiche di originalita'. sta di fatto che noi stiamo transitando su una piattaforma ogs per la gestione dei periodici scientifici che fa capo a una casa editrice universiatira quindi questo e' uno dei paradossi dell'evoluzione delle teorie digitali accademiche. per quanto riguarda la scrittura, siamo ancora piu' indietro, perche' qui non si sta parlando naturalmente delle versioni pdf a libero accesosdi articoli o libri. se parliamo di potenzialita' per la scrittura del digitale pensiamo ad altre cose, a una sperimentazione a 360 di che cosa attraverso il mezzo telematico puo' contribuire a innovare la forma della scrittura storica, la forma dell'esposizione, l'uso della parola, della comunicazione multimediale. ai fini della presentazione storica. su questo e' stato fatto pochissimo. ci sono stati degli esperimenti interessanti, io non ho proprio delle cose aggiornate. ci sono esperimenti interessanti sia ad accesso libero sia nel mondo dell'editoria commerciale tradizionale pero' secondo me siamo asollutamente lungi dall'aver esplorato davvero queste potenzialita' e soprattutto siamo lontanissimi dall'aver spinto i ricercatori a sperimentare, a mettersi alla prova nell'uso di queste tecnologie per la scrittura storica.

Nessuna tesi di dottorato viene prodotta in forme diverse da quelle tradizionali, nessuna ricerca trova un sbocco che sia diverso diigitsal o non digitale non conta ma che sia diverso dalla gabbia tipografica. siamo veramente ancora molto lontano dall'aver esplorato le potenzialita' che ci sono, che sono enormi. anni fa c'e' stato un progetto in america che e' stato pionieristico in questo senso, che e' stato il famoso Valley of the Shadow, che e' stato senz'altro interessante perche' era un vero tentativo di integrare pezzi di testualita di esposizione verbale testuale di racconto storico, di analisi storica con fonti di tipo archivistico con dati di tipo quantitativo attraverso un' impostazione molto pratica che dava una grande possibilita' di sfruttare una certa creativita' da parte dell'utente. onestamente non so se ci sono stati altri esperimenti signifcativi in questo senso pero' secondo me questa era una strada veramente interessante. ricordo ancora con enorme ammirazione e simpatia ma al tempo stesso con un sorriso per sottolinearne in qualche modo l'ingenuita' gli esperiemnti di robert danton nel 1998. che come sperimenti di innovazione della scrittura storica se li guardiamo ora a distanza di quasi 15 anni ci fanno sorridere eppure sono stati un tentativo che voleva essere da parte di uno storico di grande prestigio e di enorme creativita' e intelligenza di indicare una posssibile strada, di invidtare a sperimentare e sperimentarsi su questo terreno ma seguito non ce n'e' stato, cosi' come non c'e' stato nemmeno grande seguito anzi direi che se non erro e' fallito poi anche il progetto degli e-gutenberg prize che aveva fondato danton per incentivare la produzione di tesi di dottorato in formato digitale che per altro non ha mai avuto sbocchi diversi da lla forma libro, comunque anche in formato digitale ma sempre la forma libro cioe' monografia di ricerca che si avvale anche di apparati inconografici ecc. per quanto riguarda l'editoria e gli operatori commerciali anche qui non c'e' dubbio c'e' stati degli esperimenti interessanti sotto forma di creazione di oggetti, dei siti accessibili su Web di contenuto storico, a pagamento, in questo caso perche' nati all'iterno di attivita' impreditoriali come andrew mattheus or cedric ely ecc. appunto a carattere monografico e sicuramente c'e' una quantita' notevole di questo tipo di oggetti andrew mattheus ha un catalogo interessante di questo tipo di cose che sono ovviamente a pagamento e che quindi e' necessario che le istituzioni sottoscrivano abbonamenti e che pero' sono interessanti ma hanno dei limiti: primo, che la loro originalita' e' tutto sommato limitata dal punto di vista dei contenuti scientifici. sono molto interessanti perche' presentano senz'altro documenti, fonti alle

quali si puo' accedere direttamente perche' trattano argomenti che sono a che sono per cosi' dire a la page, quindi imperi, coloniasmi, storia globale, storia dei commerci, storia della finanza, storia dei consumi, quindi diciamo temi di storia sociale e storia culturale molto a la page, in questi senso sono originali, ma alla fine dei contenuti scientifici sono piuttosto limitati. Il tipo di costruzione della comunicazione era pur sempre quella della parola scritta. integrata se vogliamo ma secondo una modalita' che troviamo in qualsiasi libro. Secondo punto, per la mia esperienza sono di difficile fruibilita' [per gli studenti. gli esperimenti che io ho fatto per sostituirli alle monografie, ai libri, alle lezioni, per renderli oggetto di riflessione, di relazione anche seminariale, sono stati esperimenti non molto soddisfacenti perche' gli studenti non hanno dimestichezza con questo tipo di oggetto, cioe' sono ancora molto legati, condizionali all'oggetto libro, addirittura all'oggetto cartaceo libro. mi sono pripro accorto che mettendoli di fronte al compito di presentare una relazione su un libro di carta e su un sito Web anche molto interessante e molto ricco come quelli che ho appena nominato, nel primo caso venivano a fare delle cose eccellenti, nel secondo assolutamente no. quindi alla fine qualcosa vuole dire. e per me sostanzialmente vuole dire che ancora le potenzialita' espressive sul pianjo della costruzione di un discorso storico attraverso le tecnologie digitali non sono state esplorare. e dovremmo invece farlo. dovremmo farlo noi che ce lo possiamo permettere perche' abbiamo i fondi di ricerca perche' non dobbiamo piu' presentare titoli ai concorsi , perche' possiamo sperimentare e nessuno si puo' permettere di danneggiarci per questo motivo. dovremmo farlo, pero' non e' semplice perche' c'e' un fattore proprio di cultura di sperimentazione e noi siamo ancora molto legati alla cultura scritta e d'altra parte ho l'impressione che non esistano ma questa puo' essere una mia proiezione indebita delle competenze specialistiche dal punto di vista dell'ingenieria Web, della capacita' di controllo del mezzo multimediale per poter entrare efficacemente in dialogo con lo storico o l'autore per creare un oggetto telematico o multimediale che possa ambire veramente a originalita' a innovativita' ecc.

Siccome mi sono posto questo problema nel momento in cui sto per pubblicare un libro, in questi mesi, che cosa avrei potuto fare per usare quel materiale, oltre che pubblico un libro perche' ci saranno sicuramente persone che vorranno disporre del libro, pero' cosa avrei potuto fare per trasformarlo in un oggetto telematico, a parte il fatto che credo che sarbebe molto difficile trasformare un oggetto libro che parte da pagina 1 e va a pagina 350 in un oggetto multimediale perche' non e' un problema di codifica ecc ma di progettazione del discorso storico. E devo dire che non avrei saputo tanto bene da dove cominciare e tuttora non e' una cosa alla quale abbia rinunciato, mi piacerebbe moltissimo provare a farlo ma non saprei tanto bene dove andare a pescare delle competenze delle quali potermi fidare, per tentare un esperimento di questo genere. potrei bandire un bell'assegno di ricerca chiedendo delle competenze multimediali, di database online, di xml di linguaggi complessi per finalizzarlo alla produzione di un oggetto di questo tipo.

C'e' una mancanza di figure che abbiano competenza storica non per scrivere il libro che l'ha gia' scritto lei ma per poter dialogare in maniera efficace, quindi i tecnici che sanno tutto d i xml e database ci sono, gli storici che scrivono degli eccellenti libri ci sono, la figura intermedia che aiuta il dialogo non c'e'. forse qua c'e' un po' di piu'....sul rapporto tra storici digitali e gli altri, cioe' ovviamente il gruppo di persone di storici che si sono occupati di questi argomenti non e' molto alto, la maggioranza degli storici non l'hanno fatto. cosa pensa del rapporto fra questi due.

Non e' facile rispondere. intanto penso che tutti quanti siamo un po' diventati storici digitali, non solo noi che all'inizio degli anni 90 sperimentavamo col Web e ci facevamo in casa le cose perche' nel 1994-5 la prima cromos che e' andata avanti fino al 2000 la facevamo in casa con l;html in una maniera banalissima roprio spedendo i file via ftp sul server e buona notte, cosa che oggi non e' piu' possibile. quindi siamo tutti un po' storici digitali perche' la disponibilita' di fonti e letteratura scientifca attraverso i canali che abbiamo detto prima e' talmente ampia che nessuno si puo' piu' permettere di ignorarla. naturalmente qui molto dipende dal tipo di lavoro che si fa perche' chi lavora soprattutto in archivio su fonti archivistiche ecc allora ricorrera' alla strumentazione digital in una certa misura quando va a cercare un artioclo internazionale pero' ne ha meno bisogno di chi lavora su fonti a stampa dal 500 alla fine dell'800 di qualsiasi genere e a seconda degli argomenti che affronta puo' trovare una larghissima parte delle fonti che gli servono sul Web. e' chiaro che il tasso di digitalizzazione e' direttamente l;egato agli argomenti della ricerca.

Non so se e' corretto parlare di storici digitali e gli altri perche' secondo me ormai siamo un po' tutti digitali, se affrontiamo certi argomenti sarebbe un po' sciocco non essere digitali perche' le fonti sono accessibili, dopo di che rimpiango il fatto che per questo motivo vado molto meno a parigi e a londra, non c'e' dubbio. perche; le fonti le trovo, quindi e' chiaro che anche chi fa uso esteso della strumentazione digitale non puo' fare a meno di andare nelle grandi biblioteche. chi fa lavoro d'archivio sostanzialmente puo' credo servirsi meno, contentarsi di un grado minore di digitalizzazione. questo per quanto riguarda l'accesso alle fonti primarie e secondarie. il discorso relativo alla comunicazione e alla scrittura, su questo siamo tutti indietro. non abbiamo trovato un contesto nel quale sperimentare e questo e' un vero peccato, devo dire che proprio mentre parlavo con lei mi e' venuto in mente che lo faro' prossimamente, presentero' un qualche progetto con una richiesta di finanziamento per sperimentare nuove forme di comunicazione storica a partire da ricerche effettuate su certi temi ecc. perche' no? perche' quello potrebbe essere un contesto dove si pro' provare a mettere a frutto competenze diverse, integrarle e cercare di tirar fuori qualcosa di veramente originale.

Pero' siamo molto indietro. e' chiaro che quel tipo di sospetto, di risolini, di sufficienza o addirittura di chiusura che c'erano 15 anni fa perche' sicuramente c'erano, perche' uno veniva considerato un... per pasticciare nelle cose telematiche, questo oggi non c'e' piu'. questo mi sembra assodato. e' entrato troppo profondamente nella nostra vita. quello che sicuramente non e' entrato, quello che - mi sembra ma non pretendo di dire una cosa valida per tutte le discipline umanistiche - mi sembra fallito e' il progetto delle digital humanities, mi sembra, almeno in italia. lei mi smentisca e ne saro' ben lieto. cioe' ogni impressione che pero' come campo di ricerca e di insegnamento separato mi sembra che non abbia dato dei grandi risultati se parrliamo per esempio di analisi linguistica, lessicologica probabilmente li' ci sono delle attivita' dei prodotti anche che non rientrano in questa mia descrizione, quindi probabilmente in quel caso non e' vero, perche' anche su questo proposito, quella e' una delle applicazioni piu' tidiche dell'informatica piu' che della telematica, alla ricerca in campo umanistico, cioe' l'analisi linguistica e lessicologica. mi sembra che sia tutto sommato ancora poco entrata nella consapevolezza io questo lo dico perche' ho dei casi sott'occhio in cui ci sono dei colleghi che hanno ricerhe di tipo lessicologico, linguistico e cosi' via che usano anche gli strumenti informatici e che pero' alla fine pubblicano libri di carta che

sono fatti per 30 pagine di introduzione metodologica probelmatiche e per magari per 700 pagine di liste di occorrenze, concorrenze, cioe' delle cose senza senso. allora qui non e' un problema di sensibilita' per le potenzialita' dello strumento informatico perche' lo usano, digitalizzano il testo fanno le analisi lessicologiche ecc ma non arrivano a pensare a produrre.... quindi qui manca qualche cosa che intervenga sul momento finale, che trasformi quelle cose in oggetti telematici fruibili. perche' soprattutto per studi di quel genere sono sicurament eimportanti, ma refrigerarli in una pagina a stampa e' una follia totale, pensando che dietro hanno milioni pagine digitalizzate, di fonti digitalizzate gigantesce. Li ci vuole veramente il salto di una struttura, di un apparato e di competenze specifiche che consentano di trasformare queste ricerche che poi finiscono per avere se no degli sbocchi cartacei in oggetti telematici. vogliamo metterli a pagamento? mettiamo a pagamento, ce ne sono tanti. ma per me il problema non e' tanto quello ma il problema e' quello della cultura digitale, della cultura tecnica, anche della cultura digitale, qui non so bene cosa possa entrare, magari anche un timore di condividere troppo il lavoro svolto, no so, ma c'e' qualche cosa che ha a che fare con una cultura digitale, una cultura anche della sperimentazione, l'innovazione ecc che segna il passo.

Di nuovo un paraddosso, abbiamo provato, sperimentato, immaginato digital humanities, strumenti, strade, figure, ci siamo immaginati di poter... io stesso ho fatto insegnamento nell'ambito della metodologia della ricerca storica finalizzato all'uso delle risorse digitali, pero' poi tutto questo non ha avuto poi dei risultati apprezzabili rispetto a quanto non e' accaduto con lo sviluppo di quelle competenze spontanee per cosi' dire che si formano attraverso l'uso quotidiano del Web da parte di chiunque, che, qualora siano sorrette da una cultura critica nelle relative discipline, e' in grado, facendo interagire questi due aspetti, cioe' una cultura di tipo tradizionale e una familiarita, una capacita', una disponibilita' anche all'uso del Web possono anche poi portare ad acquisire un grado di digitalizzazione superiore quanto meno nella ricerca e nell'impiego delle risorse. ma al di la' di questo ho l'impressione che non siamo tanto andati. poi non abbiamo citato tanti esperimetni che abbiamo fatto ma questi sono solo appendici a cose che le avevo detto prima, cosa che riguarda peraltro... insomma e' google che ha rivoluzionato tutto. Sono quegli algoritmi li' che hanno rivoluzionato tutto perche' io ricordo che quando si parlava di indicizzazione del Web. ma lei si porrebbe oggi un problema di indicizzazione del Web con google? no, fa ridere no? noi all'epoca ci ponevamo il problema di indicizzare , creare dei repertorio, in cui abbiamo creduto seriamente e lavorato seriamente, lo dico senza problemi, non cito nessuno dei miei numerosi colleghi di firenze, di palermo, di pavia di napoli che hanno lavorato a questa cosa. cioe' avevamo immaginato di poter anche noi proporre unop di questi strumenti che erano stati sperimentati negli stati uniti, perche' hanno cominciato li' per la prima volta, i motori di ricerca d'area, cioe' dei search engines pero' limitati a porzioni selezionate del Web. si chiamavano limited area search engines (LASES) e ne abbiamo fatto anche uno sugli studi storici ma non ha assolutamente resistito alla germinazione incontrollata del Web e soprattutto poi alla nascita di cose che non ptoevano essere fatte rientrare in questo tipo di ricerca automatica perche' facevano parte delle grandi banche dati testuali, pubbliche o non pubbliche, a pagamento o non a pagamento eccetera. allora volevamo lasciar fuori quelle cose da un lase? no, non era possibile e quindi sostanzialmente la cosa e' fallita, senza considerare che perche' una cosa del genere avesse senso ci sarebbe voluta un'equipe di persone in grado di tenere

costantemente aggiornato il database di siti, ricercati, vagliati, indicizzati, descritti, da inserire dentro questo database che era il deposito di dati di informazioni sul quale lavorava il lase. esperimento interessante, indicativo di un certo modo di affrontare le problematiche, giustificato per l'epoca ma che e' totalmente saltato con google e con tutto il resto.

Interviewer*: Un commento sulla formazione dei giovani, dei futuri storici... secondo lei ci possono essere degli elementi nella formazione dei futuri storici per creare un po', per creare una nuova generazione piu' consapevole, piu' disponibile alla sperimentazione, se ha senso*

Certamente ci dovrebbe essere una parte di formazione specifica sulle risorse telematiche, questo non c'e' dubbio, questo pero' e' un lavoro che - una volta no - ma oggi e' un lavoro che pososno fare in modo eccellente un bibliotecario, hanno figure di questo genere che si sono specializzati nella reference attraverso gli struemnti telematici, fa parte del profilo rinnovato del librarian. per quanto riguarda altri apsetti, la scrittura, ma devo ragionare in termini di un nuovo modo di scrivere, ma i nostri studenti non sanno scrivere l'italiano. noi avremmo bisogno di sottoporre tutti a dei corsi di italiano scritto. tutti, tutti, tutti, tutti, dai chimici ai medicini ai giuristi ai letterati ai filosofi, tutti avremmo bisogno di diverse tipologie di insegnamento di italiano scritto. questa e' una cosa che io purtroppo ho l'impressione che le nostre universita', nelle universita' che conosco certamente non ci sono o ci sono in modo molto marginale, ma tra l'altro potrebbero dare anche un enorme spazio di presenza di attivita' agli specialisti di questa materia, verso la creazione di corsi obbligatori per tutti gli studenti di ogni facolta' e di ogni disciplina. Quindi passare direttamente alle nuove forme di scrittura legate al Web rischia di peggiorare largamente la cosa perche' ci troveremmo magari a forme di contaminazione linguistiche spaventose. naturalmente questo non vuol dire che non potrebbero esserci dei percorsi specialistici attraverso dei master dei corsi di specializzazione, delle cose specialistiche per figure avanzate, quanto meno con laurea magistrale se non addirittura master post laurea o dottorati. anche sul tema dei dottorati per esempio i tentativi, adesso me lo dica lei che vive questa esperienza e la vive in un contesto che ha saputo valorizzare enormemente piu' di noi tutte queste potenzialita' della telematica, pero; in italia ci sono alcuni dottorati che vevano nella multimedialita' per la conoscenza storica il loro obiettivo principale. Ho in mente due iniziative alle quali ho partecipato, una a bologna che faceva capo a francesca bocchi, medievista, storica della citta' e un altro a pavia o milano, sempre un dottorato di materie storiche ma con una connotazione specificamente. comunicazione multimediale per la conoscenza storica. non mi pare che si siano consolidati e abbia prodotto delle cose... io onestamente non ne ho piu' sentito parlare. quindi e' difficile pensare a dei pecorsi stabili istituzionalizzati mentre sarebbe molto piu' interessante pensare a dei percorsi professionalizzanti piu' brevi rivolte pero' a chi ha gia' una preparazione specifica solida. certo molto dipenderebbe anche dalla possibilita' di dotare i sistemi bibliotecari degli atenei ai quali fanno capo in genere anche le case editrici universitarie, di figure dotare di una professionalita' che potesse essere sviluppata in questo senso.

Quello potrebbe essere forse il contesto piu' specifico nel quale andare a formare e quindi rendere disponibili delle competenze tecniche professionali in grado di poter dialogare con gli studiosi per produrre degli oggetti. io questa cosa qui devo dire la

verita' dentro una casa editrice universitaria, soprattuto ora che si sta mlto dinamicizzando tutto quanto col discorso degli archivi istituzioanli dell'open access ecc una figura cosi' la vedrei molto bene, secondo me ci sono gia' delle persone che hanno delle competenze anche di tipo grafico digitale elevate. utilizzarle, farle collaborare in forme di sperimentazione editoriale di costruzione di oggetti della ricerca innovativi secondo me sarebbe interessante. Non abbiamo parlato di ebook, che non ha a che fare direttamente con la storia ma mi interesserebbe sapere il parere di una persona come ,lei che si cimenta nell'elearning. io, parlando cosi' a ruota libera ho un'esperienza con una universita' telematica italiana... che spero che non vada avanti che sono rimasto stupefatto quando mi hanno chiesto di andare nella sede di questa universita' che non e' vicino a torino e nemmeno a trieste per correggere i compiti. dovevo leggere dei fogli di carta. e io ho detto scusate ma si sta preparando un'universita' telematica e io devo venire, fare 6 ore di viaggio per correggere dei fogli di carta, ma stiamo scherzando? mandate un ... eh si in effetti mi risponde la segretaria, potremmo digitalizzare e mandarle o addirittura, tutte queste cose non potrebbero essere fatte direttamente online su un sito dedicato con degli spazi dedicati protetti dove gli studenti fanno le loro prove e noi accediamo e correggiamo. sono cascati dalle nuvole. allora forse c'e' qualcosa che non va, ma forse da noi. e' grottesco che un'universita' telematica non avesse neanche pensato a fare queste cose, non voglio neanche pensare ai finanziamenti che negli anni hanno avuto per sviluppar ele loro attivita'.

Pero' questo e' un tema... io devo dire non ho esperienza diretta di elearning quindi non mi sbilancio a dire nulla. uso la didattica telematica nel senso che abbiamo un programma che gestisce i corsi online nel senso che ogni corso ha un suo spazio dove si possono fare una molteplicita' di cose da depositare materiali per lo studente, le relazioni degli studenti, fare calendari, delle tavole rotonde, delle chat si puo' far di tutto. tra l;'altro uno strumento complicato, non e' per niente amichevole ecc. pero' devo anche dir eche forse anche per questo motivo non e' che l'abbia sviluppato tantissimo. non ne ho veramente sondato le possibilita', pero' penso che siano enormi. non ho un panorama internazionale o globale di questo tipo di attivita'. Pero' mi risulta che le grandi universita' americane abbiano dei programmi dedicati solo di elearning che si rivolgono ai paesi piu' lontani cosiddetti del mondo non sviluppato. quindi ni realta' e' un territorio vastissimo che sarebbe da esplorare. da sfruttare a patto che non sia pero' occupato manu militari da qualche grande consorzio con la grande iniziativa che succhia finanziamenti e poi non pensa neanche ad aprire un sito telematico dove gli studenti possano depositare le prove che i professori devono correggere. e non so neanche le cosiddette universita' telematiche italiane come funzionino, quello che sono state riconosciute, non voglio neanche nominarle. non lo so, pero' sarebbe interessante una piccola inchiesta che spiegasse bene come funzionano queste cose. lei sta facendo una ricerca che si intitola... sono il direttore della scuola dottorale, se vuole le do una schiera di dottorandi da intervistare... noi abbiamo un insegnamento di informatica umanistica che viene fatto a contratto da un npostro laureato in geografia che poi ha fatto anche il dottorato che si occupa soprattutto di GIS. per avere eventualmente delle informazioni che non sono centrali ma riguardano l'atteggiamento dello studente in formazione di vario grado verso gli strumeni informatici potrebbe essere interessante anehce confrontarsi con lui che ha certamente piu' di me il polso della situazione. da quello che vedo, sento, l'informatica umanistica non e' stata in grado di ritagliarsi un profilo autonomo significativo. Lo vedo anche da questo tipo di attivita'. diverso e' se

nell'ambito, come io ho fatto per anni e quest'anno ricomincero' a farlo, dell'insegnamento della metodologia della ricerca storica, allora si fa un discorso finalizzato proprio a quello di cui parlavamo prima. adesso quest'anno ci riproviamo e vediamo un po' cosa e' cambiato rispetto a quando l'ho lasciato, che e' stato credo il 2006, per altri motivi non ho fatto piu' quell'insegnamento li' quindi magari tra qualche mese alla fine del corso verso maggio giugno avro' delle notizie fresche.

Io ho anche laureato a torino uno studente in storia moderna che poi e' rimasto molto legato a me e che ha fatto molte cose, non solo di ricerca storica ma anche di pubblicazione nell'ambito delle applicazioni informatiche per la ricerca e soprattutto anche nella progettazione di software e l'ultima cosa che ha fatto, ho mantenuto nei suoi confronti un rapporto di supervisione, ispirazione, commento e guida, ma non di competente supervisione dei prodotti finali, e' un software pe rl'estrazione di informazioni citazionali da database testuali, soprattutto per le discipline umanistiche perche' e' settato in modo da riconoscere estrarre e organizzare proprio... e' una specie di zotero pero' molto piu' finalizzato e che lavora in automatico, genera automaticamente e organizza delle estrazioni citazionali tematiche soprattutto in campo umanistico e lavorando su database testuali di varia origine e natura. lui e' un vero storico digitale da un certo punto di vista perche' ha una competenza storica, ha scritto dei buoni lavori di argomento storico e pero' e' anche riuscito a sviluppare, a interpretare ecco in modo originale le necessita' del ricercatore storico per pensare, pensare ha molto un senso di insieme, ma proprio realizzare con altri , perche' abbiamo fatto uno spin off qui a trieste che poi si e' trasferito a vercelli per arrivare a produrre qualcosa che concretamente potesse assistere il lavoro di ricerca, perche' lei provi a immaginare non semplicemente di andare su jstor a cercare le cose ma di lanciare una ricerca attraverso questo motore, su jstor, e tirarne fuori una bibliografia organizzata. Questo zotero non glielo fa fare.

End of interview

APPENDIX 3 - EXAMPLE OF INTERVIEW TRANSCRIPT FOR THE UK

UK-A

Interviewer: Thank you again for accepting to listen to me and to let me ask you a few questions.
The reason why I originally found your name was really to do with the 'Association for History and Computing', which is something that I'm trying to understand. I don't know if we should start with that.
In general, my main concern is to see how much of these internet and Web technologies, methods and methodologies historians are really using for their research and their teaching: "Why yes?", "Why not?" and "What is the situation?"
Up until now, I've interviewed a few historians in Italy, so I know a little bit more about the situation in Italy, but I don't know a lot about the situation in the UK. So, maybe you could comment on what your views are on this?

Interviewee: I'll just give you my background as well. I did a Master's degree in 'History and Computing' back in 1986, so I guess I'm somebody who has already been interested in technology.
Then, I've been working at […] for the last 20 years. In addition to being a member of the Association for History and Computing, I'm also a National Teaching Fellow, which, in the UK, is an award given to innovative teachers.
[…], I was the Director of something called the 'History Subject Centre', which was a centre designed to support teaching and learning in history in higher education.
That is my perspective, if you like. When I was Director of that centre, it meant that I went around and saw a lot of history departments as well.
From my perspective, I would say that really in the last five years, teaching, learning and research has been transformed by Web technology. Mostly the reason for that, I think, is because of the widespread digitisation of historical sources and the accessibility of those, and also the digitisation of journals and those being made available widely.
That has transformed our research practices, in general, for all historians, I would say. You do a lot more from your desk now than in the archive. From my own research on British historians, things like newspapers used to be really inaccessible.
For my PhD, I did research on elections and I used to have to plough through microfiches of lots and lots of newspapers, and the only way I could do it was to focus on the weeks before the election, but I could easily miss very interesting information just because I couldn't read of every issue. Now, with widespread

digitisation, you can pick out those themes and you can find information. You can look for very strange or esoteric words or events and get them immediately.

That's really transformed research and that, I think, has led to changes in teaching. Thinking about newspapers again, those are sources that I would not have used with undergraduates because they don't have the time, it's too hit-and-miss and they are very difficult to use. I can use them now, so in a way, it's made research-based teaching much more available.

That's where I think the big change has come and it's been driven by the mainstay of our research and teaching, which is the archive.

Other things, obviously, have made the use of technology easier. Things like podcasting matches and videoing matches. There was a lot of scepticism about that in the profession and whether students would turn up: "What is the point of doing it?" and "Will it take more time?" Actually, like most things, you find that, with students, anything that is added value and anything that is extra, they do appreciate. They still turn up to lectures because they want the face-to-face contact. They like to be able to download the lectures and listen to them on their iPods. They like them for revision purposes.

They appreciate the fact that it's an extra resource that they didn't have. Student feedback is quite important. Once one or two people start doing it, it becomes more the norm and so more widespread use becomes adopted.

Even with things like putting PowerPoints on the Web, basically, you are then creating a Web resource for a module. It's this thing about adding value. It then becomes more than just a lecture. It is contextualised.

Obviously, I am someone who is open to the use of technology and I have been throughout my career. There are things that I use. For example, I use Google and Google Maps a bit, but it's not one of my sources. I would guess that that is something which is not going to be widespread. It's going to be something where I'm interested in the technology and I'm interested in trying different things.

I haven't used stuff like Twitter or social networking in my teaching, but it might be something that I would be open to. In general, those are what I would say are more outlandish, more innovative or more on-the-edge. You are always going to have to have people who will be prepared to take risks, who are early adopters or who are interested in technology.

There are some basic things which I think have transformed history teaching across the board, and a lot of that is driven by changes in the way that we work and research ourselves that has necessarily led into changes in the way that we are teaching.

Interviewer: This is really interesting because compared to what I'm hearing from Italy, a lot of concepts are the same but just the verbs…
A lot of the things you were saying in the present or the past, in Italy, we tend to say "in the future" and "maybe". It's strange.
For me, also interesting is the aspect of the person that takes risks who does something that maybe other colleagues haven't really tried yet, and what kind of professional environment there is. Also, the idea of the Association for History and Computing is very interesting for me because, as I said, what I've learnt up to now with Italy is that the innovators are left alone, to a degree, where they almost lose the strength and the interest of innovating so much because there is nothing around them.
I am guessing that maybe the situation is different here.

Interviewee: It's not entirely different. The Association for History and Computing is pretty much in abeyance at the moment because it has become quite mainstream and it has lost its value as a niche organisation.
We do have conferences and workshops where best practice and teaching is exchanged. Often research papers and journals like the *American Historical Review* have articles or features on technology and teaching, which look at some of these aspects.
There is, I would say, in the Anglophone world, ways of learning about innovations and teaching. Increasingly, with things like blogs and Twitter, you are getting feeds from conferences directly linked to Twitter accounts and stuff like that, so it's much more accessible.
There is a sense of practice-sharing. There has to be a cultural mentality about taking risks and trying things. You are not going to get a lot of those in every department, so there is also a sense of being isolated. You could also say that the rewards for doing it may not be embedded. You might not get a reward.
I have been rewarded. I did get this National Teaching Fellowship, and there aren't that many historians that have got them. I got an award from my university as well for teaching innovation. So, I have been recognised.
If it goes wrong, it doesn't matter in a way if it's useful. I don't think I can damage the system.
It is that collaborative way of working. One of the things that I have done recently is to introduce audio feedback into the students' essays and things because of doing podcasts of lectures. I realised that they liked that and it was a way of learning for them which they were comfortable with. I asked them if they were interested in trying this.

They just submitted their essays as PDFs and then instead of me writing comments on them, I just did little audio clips which I

inserted and then sent the PDF back to them. I got a really, really positive response for it, and part of that when I actually went down and analysed what I'd done was that I can speak a lot quicker than I write.

I also speak in a less formal way than I write, so I am more engaging, probably warmer and more enthusiastic. I tend to write in 'marking' speaking, like, "That was a good analysis," which doesn't necessarily tell them very much.

I think I worked out that I gave them three or four times the amount of feedback in words. Also, the feedback I gave them was valuable and perhaps more personalised. When I was marking the essay online, from looking at it and annotating it, I was thinking of talking to them.

I didn't know whether it would work or whether they would want it because students can be quite conservative too. That worked, and that encourages you to then try different things, I think.

It's also the tools, I guess. In Adobe now, you can just click on a little audio and speak and you don't need any other equipment. The audio quality wasn't brilliant, but it was good enough. It wasn't going to be published on the Web. This was just for themselves. That made it very easy for me. It took me the same amount of time, but I gave them more…

As the technology gets easier and allows you to do more things, if you are willing to experiment and trial things, then you get benefits. Some things don't work, take up too much time or students don't care. You might have spent loads of time doing something and they're not really interested in it. Then, "Okay, that doesn't work, but it's no massive loss."

Interviewer: Do you think, in general, a good amount of historians in the UK do try new things and experiment or that still the majority stick to traditional ways of teaching? Of course, if you have the resources available, you don't go back. In what requires action, generally, are historians trying new things or is there still a good deal of resistance?

Interviewee: I think there is resistance to whatever is the newest thing. A few years ago, it was podcasts and audio and video clips. At the moment, I think there is quite a lot of resistance to the use of social media. I think the obstacles or things that people say are the same every time. It's about quality of experience and a risk or danger to intellectual property.

Research, especially in the Humanities, is a very individual thing: "It's my module. It's me. You have to have me with it. It could be a very similar module, but it won't be the same."

There is that thing that "This is mine and I don't want to share it." A lot of technology is about sharing and collaborating. That is a resistance element.

The other big one is 'time'. It's often easier to carry on doing things the way that you have always done them than to try to change something, even if it will, maybe in the medium term, save you time. With any new technology, there is going to be an element of learning or experimenting with it, so you need an incentive to do that. I guess the incentive in research terms is that you get the benefit: you write the article quicker or it goes on your CV. In teaching, it is less obvious what the benefits are.

My experience, again, has been that for wholesale change, it has to be a cultural thing in a department. Often, it is imposed from above, maybe via a module that is taught across the whole department, like a core course. You will get individual people trying different things, and there will come a stage where there is either student demand or the perception from above which imposes the change. Then, it just becomes accepted and the cycle starts again to the next new thing.

I can look back to my career at whatever new thing it was and see the same things coming forward today: "I won't do this because…" There is this perceived danger to academic quality, which is a bit intangible. I think there is a conservatism in the profession. If you look at most History degrees, in Britain, they are still very much taught in the same way. They will have lectures and seminars, and most assessments are essays.

There are lots of other innovative things going on, but the core is that and that has been the case for 100-odd years or more. It's not practice-disciplined and it's not creative. There is this sense that in order to get a good History degree, you need to have attended lectures, seminars and written lots of essays.

Interviewer: In terms of the future generations, do you think that doctoral students have an opportunity to be trained in some of these methodologies and some of these tools, so that when they become historians, some things will be just the norm and that maybe that will change, apart from, of course, the most basic things that they learn anywhere? The tools and how to use them specifically for historians: do they have a chance to have those…?

Interviewee: All early-career academics in Britain have to do the Postgraduate Certificate in Higher Education in order to teach. A lot of doctoral students also have to do some sort of qualification and training. In those courses, there are opportunities to introduce new technology and explore those uses.

I would also say that PhD students are more open to new ways of researching as well and collaborating. Therefore, they are also receptive to new ways of teaching.

The problem with early-career academics, whether they are doctoral students or whether they are newly-appointed lecturers, is that they often have very little say in what and how they teach. They are then very dependent upon their mentor, their supervisor and their module leader. They may find themselves circumscribed. The problem they have is they don't have the power or the confidence to say, "I want to try."

I can make a decision myself to try something like this. I don't need to get any approval from anybody. If it goes spectacularly wrong, there may be some payback but, generally, it's fine. People at the beginning of their careers are not in that position and that is difficult.

That's what makes the pace of change slow, I think. That's why often it comes from the top, from more senior academics. They may not particularly want to engage with the technology themselves, but they will be under pressure, either higher up in the university, because universities want to be seen to be innovative or trying things, or lower down from the students themselves, who are experiencing these things and are saying, "We want more of this type of teaching." So often, it is at that stage that things happen.

As I say, I think early-career PhD students are often more open. It is just what opportunities they get to actually put it into practice.

Interviewer: It is really interesting. I was expecting differences, not only in how the situation is but how the culture of the academia is, having studied in the UK. It's different. When you are here, you think as a UK student. For me, when I am back home, I think as an Italian student. When you are actually comparing the two attitudes and the pressure from the students… No. We have other problems, of course.

One of the things that for me is quite interesting is the involvement of non-academic historians, or even not-properly-trained historians, with history research, publications or output. That, of course, is possible due to the technologies and the accessibility of the technologies, but I was wondering if you had any other… It could be the relationship between academic historians, professional historians and amateur historians.

Interviewee: There is one very powerful driving force at the moment, and that's the impact of research. Our research in the next 'Research Excellence Framework' is going to be assessed not only on what we produce but on whether it has made a difference to the public. That doesn't mean to say that suddenly, we are engaging with non-academics in a way we haven't before, but now we are going

to be actually assessed and measured on that. As soon as you have a driver like that, it changes the relationship.
In fact, at the moment, I would say that the potential for collaboration with lots of different types of groups is very high.
Those have been built into the research experience and design. If you are designing a research project, you are also automatically thinking of how that might be disseminated or how that might engage with the wider community.
Also, in terms of teaching, another big driver at the moment that we are being measured on is the employability of our students. For historians, it is quite difficult to make that connection between History degrees and employment.
Actually, what is being built into curriculum design here and all over, I would say, is some sort of engagement with museums, archives, schools, local history groups or oral history projects so that students are getting something else from their History degree, which is that transferable skill and that relevance of history.
We make a big thing, as historians, of saying that history is a very relevant discipline, not just with the skills it produces but also for the content. With the research that we do, we do think it is relevant to people today, but the onus is being pushed back further and further on us to say, "Well, how is it relevant? Prove it."
Then, from the other point of view, I think the technology means that little amateur groups can put stuff up on the Web that we, as academics, may not see as very analytical and it may just be transcriptions of sources, but we can take the fruits of their labour and research, use it for ourselves, add value to it and reproduce it in a different way.
We are also benefitting ourselves from technology because anyone now can set up a Website. Again, you come back to quality.

Even in Italy, I know there are lots of private archives and lots of archives just within the religious institutions or big families. In Britain, what has happened with a lot of those books is that they have been seen as very personal to a particular institution or family. Now, people are transcribing them or photographing them and putting them up on Websites. Actually, that is making a whole new range of material available and accessible for all sorts of groups.
It might be of interest to the local community which it represents, but it also then is of interest to us as academics or is of interest to my students who might have to write a dissertation and are looking for something unusual, local or specific.
I think that's what technology has done: it has broken down some of the boundaries for research for an individual, whether you are

looking at your house history, your family history or your local history. It can be of wider value and have wider significance. I think that is becoming understood now in a way, which I don't think it was previously because you had academics over here and people doing little projects over there. There was no way of communicating between the two groups.

Television has made a big difference. History is very, very popular. There are lots of practical programmes like *Who Do You Think You Are?* and those doing research, but there are also historical dramas like *Downton Abbey*.

All of these things are really popular, but are bringing history to wider groups of people, so it's a good moment really to exploit that interest in history. Even if it's to bring a very little academic spin in a way, like a critique of *Downton Abbey*, you are actually bringing some of the academic research forward into the public domain.

Interviewer: It's very interesting, of course, when you evaluate a situation that can be similar in many ways, but then if you see the opportunities and the potential, especially in collaboration, it's a completely different perspective than if you see the threats, the dangers and the attacks.

On a slightly similar topic, do you think there are some disciplines or areas of history that are more suitable or tend to be drawn more to the use of technology, or does it really depend on the scientist or the scholar and his or her use or own attitudes and decisions?

Interviewee: I think there are areas. Stuff like 'Economic History' and analysing data is impossible without the use of technology to some extent, but that doesn't necessarily mean that economic historians are then willing to try out loads of other technologies.

For someone like me who uses newspapers a lot for their research, it would be unthinkable for me now to go back and use microfiches instead of digitised copies. I just wouldn't do it. That doesn't necessarily mean that people who use digitised newspapers are going to be open to other sorts of technology.

I think there are some aspects or some sub-disciplines of History where you would use some bits of technology, but there also has to be that wider culture of trying new things.

That person may be in any field and will find the benefits of technology. It would be easy to find in something like 'History of Ideas' or 'Intellectual History'. They are not automatically what you would think as ones where the use of technology might be helpful, but if you've got the right person in there, then they may end up using text mining or textual analysis tools to analyse intellectual text. It's all possible.

I think it is more about the person, but I think that all historians now, to a greater or lesser extent, have to engage with technology for their research, and probably their teaching as well.

Interviewer: Do you think there is still a place for something like the Association for History and Computing? Does this still make sense or did it ever make sense to have a group of historians who are really committed to exploring these possibilities being together as a group and working together within that definition?

Interviewee: I think it was really important when it was established, which was in the late 1980s. To some extent as well, in that period, the technology was more complex to use. It wasn't that easy. Therefore, a lot of it was support groups in a way.

Where I see it happening now is in things like 'Digital Humanities', in that equally complex technologies have been applied to digitising or mining huge amounts of text. Therefore, you need that expertness, and I think that's where groups like that are really helpful because it's really at the very, very innovative and design end, or the research and development end, of the technology, rather than at the practice.

That is where you need to bring software engineers and IT experts together with historians. What happened in the early days of the Association for History and Computing was that there were things that were happening in IT which historians could exploit, but the IT people didn't know that or the Computer Science people didn't know that. We didn't know enough about the Computer Science skills to articulate it.

To my Master's-level students, I teach the use of historical databases as historical sources and then constructing their own. I talk to the Computer Science people in their department about how they teach databases.

As historians, we have sources that exist and we design a database that can analyse them. What happens in business and how they teach it is that they design a database and then they get information to fit the database.

We have lots of messy, fuzzy data that is incomplete and strange dates. If they wanted a date, they wouldn't allow somebody to input "Easter", "Michaelmas" or "St Valentine's Day". They just wouldn't allow it. Whereas, we have a source and it doesn't say "30th April", but it says "Rent Day" or something like that.

Their view of what I was doing with my students was more sophisticated than they do with their students because of the needs of the discipline. That's where you need the two to come together.

The technology can deal with things like that, but it doesn't have to in a world where you can say, "I want dates like this," and you

enter a date like that or it's not entered. We say, "We've got this great document. We want to analyse it. A database would be the best way of doing that, but it doesn't fit nicely into some of the rules." That's where that needs to be that dialogue.
That's what I see happening now. As more and more stuff is being digitised, now, people are willing to have cross-selections and do things like be able to comment, upload and do the more social networking stuff where you can upload your own stuff and add to digitised collections. That is difficult for us to get our heads around. That's where the technology experts are helpful.
For me, it's not so much the bread-and-butter stuff. It's the blue-skies thinking. It's important then for historians or academics to have a voice, but I think Humanities people can get easily lost. Actually, the other thing that people say to me is that the real world wants to do the same sort of thing; whereas, often, technology experts will say, "This is the easiest way of doing it and this is the best way of doing it. You're going to do it like this."
We are the real world… We want things like this and we don't care if it is easy or not.

Interviewer: "It needs to work for what we need, not the other way around"?

Interviewee: Yes. That's the tension, isn't it?
That's where these user groups or associations… It is bringing together experts in different disciplines who can say, "This is what is possible," "We could try this," and "What do you want and what do you need?"

Interviewer: It's funny because my dad is an IT expert. He is retired now, but it was the standard "Switch it off." "But it doesn't…" "No, switch it off." "Can you tell me…?" "No, just switch it off. If you reboot…" "Okay."

Interviewee: They are trained for different things.

It was very interesting talking to the Computer Science people about how they teach databases because it is the total opposite from how I do. I say, "We've got all these sources and these are messy. How do we do it?" They say…

Interviewer: "Standardise it. When you see it, call me"?

Interviewee: Yes, and "Don't do it. Don't go there."

Interviewer: It's a very interesting field, of course.
Do you see any collaboration across borders on these issues? Do you have a chance to discuss or exchange ideas, projects or work

together with historians in other countries on these issues or not so much?

Interviewee: The Association for History and Computing was very international and that was what was very good about it. I see less of it now. The only potential, I think, is in European Union-funded grants or American-British partnership type things, of which there are some.

Again, I don't think that there has been a lot of good practice or a lot of good examples of cross-nation collaborative working using technology, which is a pity because I think that it could work.

I think it's always harder in teaching. It's easier in research. I think teaching practices tend to be quite national-based, as we have already intimated. There are all those obstacles that I've put up. Then, the next obstacle that people put up, if you go to a different country, is: "We don't do stuff like you do it." It's harder to have that dialogue.

It would be hard for me to influence my colleagues in the UK when I know how they teach. If I go to Italy or Australia and they say, "We don't teach History like that," there's not much I can say. I can't say, "Change the way you teach."

I think research-based collaboration does happen a little bit, but not much. I think there is more potential for that, but I think with best practice and teaching, it's really, really hard to do those across borders.

That's my experience anyway.

Interviewer: Do you think there is this situation because historians tend not to work an awful lot across borders anyway? Is it particularly harder because then on top of it, it is the difference in how technologies are used and how they are perceived? Is it more or less because historians don't really work across borders much anyway?

Interviewee: I think transnational or international historical research is always difficult because you need to have specialisms in archives and languages in different countries. It does happen, but it doesn't happen as much. It's partly that.

When I think back about the Association for History and Computing, where it quite worked was that the archives were involved as well. I'm thinking of people in the Netherlands and Scandinavia. They already had existing networks of archivists and academics when they came to the table. If you had a discussion with colleagues in Denmark or somewhere, they were already bringing on board their experience of working with the archives and a wider network.

When it worked then, I thought it was thoroughly good, but everyone was setting off on a journey at the same point. I suppose the problem now is that archives and digitisation have

got much more specialist. Some of it has gone commercial and the links to academics are less obvious. Then, you've got the different national contexts and boundaries. It has all become spread out and difficult; whereas, I think 20 or 30 years ago, you were all pioneers together and it was new.
Now, you have got a lot of people, they are all at different stages and they want different things. It has become a bit more messy and fuzzy, and I think that's made it more difficult.
There is no reason really why transnational stuff shouldn't happen, but it doesn't so much.

Interviewer: When I was trying to understand who I wanted to talk first, which, of course, were the experts, the people who were engaging in these new technologies, with Italy, it was quite easy. You can really find the names in a few days because there are so few.
In a way, it makes it easier because it is a group that is so small and there are so few people. They all know each other and they all know what other people have done and what their situation is. It is the way when you are very few.

Interviewee: I think that was what it was like. It was very much a few people and a lot of goodwill. Also, it was much harder then. What you've got now, I suppose, in the UK, is that the base level is much higher. There are more people using technology. It's more difficult to find the real pioneers and innovators, and there seems to be a lack of opportunity for that and perhaps just less need.
In some ways, it's got more difficult. If you are at the earlier, more pioneering stages, it's almost easier to find the experts or people who are really out there. There are probably those people around, but they don't appear anywhere.

Interviewer: The problem that I'm seeing is that in a way, if I compare Italy and the UK, we have lost the train. The train has gone. If the pioneers in Italy wanted to create a connection with people who do similar things or have similar aspirations in other countries, it would be very difficult for them to talk together. They were saying that maybe the Association for History and Computing was just too advanced to work, when it was most probably the other way around.
It is complicated. I don't know how to put it.
These were my basic questions. Do you have anything that I should know, ask or think about in this?

Interviewee: No, I don't think so.
My perception is that actually technology is pretty much embedded in History research and teaching in the UK, but that

doesn't mean to say that there is real innovative practice. That is still, I think, the preserve of quite a few people.
I think it could be deceptive. You could look at a History curriculum or talk to people and come away with the impression that, perhaps compared with Italy, seems great, but… I suppose we are at a mature stage. We have adopted it and it's being used generally, but sometimes not particularly innovatively.

For me, there is still a need for ways of encouraging innovation and sharing practice. It does happen, but you have to work at it a bit. I suppose this idea of 'communities of practice' is quite important to develop and explore. I think like all professions, there is a lot of conservatism. That's always going to be the case, I think.

Interviewer: So, there is the idea that you said before that sometimes it does come from above and that the university, the department and the programme need to be perceived as at least trying to do something new to offer that is part of the process? I don't know how effective that is.

Interviewee: I would say that is probably the most successful way of getting technology adopted across the board. The other way is a 'bottom-up' way.
The 'pioneer' way: you are always going to be seen as either "Great, we've got someone in our department who does that so that we can tick that box," or "Oh, my God, Sarah is doing these strange things, but never mind."
The other thing is that with the students, it is getting more important because of fees. That has always been the case, I think, in the UK. There has been a tendency that if the students start saying, "We want this," then departments tend to respond to that, even if it is in a minor way and even if it is not going the whole way. Coupled with this top-down, they then use the student demand as evidence of need.

In my experience, the most effective way of getting it embedded has been that somebody at the top says, "Right, you are going to do this," and then stops all those barriers. You cannot then say, "I'm too busy" or "It's too risky."
That has happened, basically, across the board, so it may also be influences from other universities. If other History departments are doing this and competitor departments are doing it, then there is a sense that "We should be doing it." So, that tends to work.

Interviewer: One of the things that I found from speaking to historians in Italy is that 99% of the time, the higher ranks of academia are opposed to everything and beyond everything. That, of course, is a big

problem. Then, the only thing that there is is the bottom-up approach, which is, of course…

Interviewee: 'Difficult'?

Interviewer: In the end, it is a matter of culture inside academia from everybody and the students tend to not ask a lot. It's also an issue of authority and the relationship with…

Interviewee: They are stronger maybe in teaching it to Italian students? We have Erasmus students though. They do comment on the differences.
I think it's the case that middle management and senior management at universities, so maybe Deans of Faculties or Pro-Vice-Chancellors, are open to change here and often actually push it through. It just becomes the requirement. As I say, that is actually an effective change agent. In learning resistance, you've got no say…

Interviewer: Yes, because it's high enough that you have to do it and not so high that you think, "Yes, we'll do it. We'll write a report next year."

Interviewee: I think there is something about that university culture and university system. Also, I suppose, we're competing. Again, I don't know the Italian system well enough and if you are recruiting mostly locally. In Britain, that is not the case. Universities like this one are competing against the other Russell Group ones. Therefore, we need to make ourselves look good against Bristol or Cambridge, not against Birmingham.
We are always looking around to market ourselves as new and innovative.

Interviewer: Yes, definitely in Italy they look at the postcode.
There are some cases where with some things, you only go to Trento, so you don't go to anywhere else because that make sense. Generally, it's more of a regional thing.

Interviewee: I think that brings a conservatism itself. You know you have got your core. The ones that you want to attract: you can very much tailor… You could do that to attract whichever external students you need. We are trying to compete across the country. Therefore, there is a need for us to make ourselves look distinctive or at least not make ourselves look behind.

Interviewer: I understand that. It's interesting.
Of course, when it goes to the more general picture, it's harder to define and harder to explain, but definitely it is part of the course.

Interviewee: It's interesting for me because I don't talk to colleagues in Europe very much, so it's always interesting to know how they teach. As I say, there is a lack of networks or communications about best interests. I think they could be very supportive.
One of the ways in which I think it might happen, possibly, with stuff like 'Bologna', is in 'audit'. I don't know how the quality is measured in Europe, but we have inspections and audits of quality. 'Innovation and Enhancing Learning' is one of the things that we are assessed on and this is why the student voice is taken seriously.
Again, this is a top-down thing. This is a government thing. If you are being measured, like with the 'Research Excellence Framework' and the 'Impact on Public Engagement' issue, suddenly, universities take it seriously.
It is possible with more partnerships and more European collaboration that there may be an auditing quality control that says that a degree in Trento has to conform to some standards in the degree at Warwick or whatever. If that looked at the student experience of technology as one measure, then, suddenly, I think, we might be interested in what Trento do and they might be interested in what we are doing. That would start that conversation.
It is, as I say, these top-down mechanisms often which actually help people who are pioneers. There's a way of channelling that. We need the Italian government to start asking more of the universities and then that might help these people.

Interviewer: They haven't done anything yet, but the first institution to measure the quality of teaching and research in universities was established in March 2011. They haven't done anything yet. Who knows?
The university, of course, has internal… We just make sure that the students come to class that specific day. The professor is like: "Write whatever you want." So, we're a little bit behind.
Of course, that would immediately give a tool to just compare and to work together.

Interviewee: Yes. I think that as soon as they introduce anything like that, as soon as they say, "We're interested in what you do," suddenly, it goes up the agenda. If it's not there, then there's just an incentive for them to carry on as normal and almost not take risks because if you don't take risks, then you don't get anything wrong. These people are doing it for themselves, not for their institutions. They don't get any reward for it. It becomes very hard. Then, there is no incentive and reward.
I sympathise in a way, but we do have a few mechanisms which mean that if you want to do something, you can push against it

and say, “Right, the students want it,” which is the biggest incentive, or “Our competitors are doing it.”

Interviewer: The single word that I have heard from the historians that I have talked to in Italy is ‘passion’: “I want to do it because I really like it. It’s fun. It’s exciting and it’s interesting.”
Most of the time, it’s an obstacle actually because of the time, and also because of the perception that “He is the one who is…”
It’s hard, but it’s interesting to see, of course, from a different perspective. That’s what I’m trying to do.
Could you recommend to me someone to talk to in this area?

IntervieweeInterviewee: Do you mean from a different institution?

Interviewer: Yes, or from this university as well.
I don’t have a specific number of people that I want to speak to. Ideally, I would like to speak to as many people as I can because I think that every interview is so rich, different and interesting. I never want to stop. I’m just talking of the UK now. For me, it’s really interesting. If you have someone in mind that I could talk to, it is really valuable for me.

IntervieweeInterviewee: Some of the interesting people you might want to talk to are at Sheffield. They have a thing called the ‘Humanities Research Institute’, ‘HRI’, which does a lot of Digital Humanities projects. One of the most famous ones is called *Old Bailey Online*, which transcribes a lot of court records from the Old Bailey. It is really popular and open to anyone.

It is a collaboration between Sheffield and Hertfordshire. The guy at Sheffield is called Robert Shoemaker and the guy at Hertfordshire is called Tim Hitchcock. They are really interesting because they have done all the things that you are talking about. They have done really difficult technology stuff from scratch. They use it for teaching, public engagement, they’ve gone on and enhanced it, and they have done other projects on connecting History and sources.
They are really at the innovative end, so they might be useful to talk to with that one. They are examples of best practice, and people who it has really paid off for. I think they are a success story. They will have had to have struggled as well, I think, and the fact that it is a success is great. It’s paid off for them and ticked lots of boxes.
They are people I would go for.

Interviewer: Thank you so much. I will try.
Thank you so much.

End of interview